



**California Environmental Protection Agency  
Department of Toxic Substances Control**

**DRAFT HAZARDOUS WASTE FACILITY PERMIT**

Permit Number:

Facility Name:

Romic Environmental Technologies Corporation  
2081 Bay Road  
East Palo Alto, California 94303

EPA ID Number: CAD009452657

Owner Name:

Romic Environmental Technologies Corporation  
2081 Bay Road  
East Palo Alto, California 94303

Effective Date:

Expiration Date:

Operator Name:

Romic Environmental Technologies Corporation  
2081 Bay Road  
East Palo Alto, California 94303

Pursuant to Section 25200 of the California Health and Safety Code, this RCRA-equivalent Hazardous Waste Facility Permit is hereby issued to Romic Environmental Technologies Corporation. The Issuance of this Permit is subject to the conditions set forth in Attachment A and the approved Part "B" Application (Operation Plan). The Permit consists of a total of 180 pages including the cover page, and Attachment A.

\_\_\_\_\_  
Mohinder S. Sandhu, P.E., Chief  
Standardized Permitting and Corrective  
Action Branch

Date: \_\_\_\_\_

ROMIC ENVIRONMENTAL TECHNOLOGIES CORPORATION  
2081 BAY ROAD  
EAST PALO ALTO, CALIFORNIA 94303  
EPA ID No.: CAD009452657

**DRAFT HAZARDOUS WASTE FACILITY PERMIT**

**ATTACHMENT "A"**

**TABLE OF CONTENTS**

PART I.	DEFINITIONS .....	5
PART II.	FACILITY DESCRIPTION AND OWNERSHIP .....	6
1.	<u>OWNER</u> .....	6
2.	<u>OPERATOR</u> .....	6
3.	<u>PERMITTEE</u> .....	6
4.	<u>LOCATION</u> .....	6
5.	<u>DESCRIPTION</u> .....	6
6.	<u>FACILITY SIZE AND TYPE FOR FEE PURPOSES</u> .....	8
PART III.	GENERAL CONDITIONS .....	9
1.	<u>PERMIT APPLICATION DOCUMENTS</u> .....	9
2.	<u>EFFECT OF PERMIT</u> .....	9
3.	<u>COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)</u> .....	10
4.	<u>WASTE MINIMIZATION CERTIFICATION</u> .....	10
5.	<u>WASTE MINIMIZATION CONDITIONS</u> .....	10
PART IV.	PERMITTED UNITS AND ACTIVITIES .....	11
<u>CONTAINER STORAGE AND TRANSFER</u>		
Unit #1	North Storage Building .....	11
Unit #2	South Storage Building.....	14
Unit #3	Sampling Area.....	17
Unit #4	West Storage Building # 1 .....	20
Unit #5	West Storage Building # 2 .....	22
Unit #6	Drum Pumping Area .....	25
Unit #7	Bin Storage Areas .....	27

## TANK STORAGE AND TREATMENT

Unit #8	Tank Farm A .....	30
Unit #9	Tank Farm B.....	35
Unit #10	Tank Farm CLR.....	39
Unit #11	Tank Farm D .....	45
Unit #12	Tank Farm E.....	49
Unit #13	Tank Farm G .....	53
Unit #14	Tank Farm H .....	57
Unit #15	Tank Farm I .....	61
Unit # 16	Tank Farm MNO.....	65
Unit # 17	Tank Farm Q .....	69
Unit # 18	Biological Treatment System Unit - Tank Farm K.....	74
Unit # 19	Neutralization Tank Unit - Tank Farm J.....	79
Unit # 20	Inorganic Treatment Unit -Tank Farm F .....	82
Unit # 21	Tank Farm S.....	86
Unit # 22	Tank Farm T .....	89

## OTHER TREATMENT AND STORAGE

Unit #23	Fractionation Unit .....	92
Unit #24	Vacuum Pot Distillation Unit .....	98
Unit #25	High Temperature Unit .....	101
Unit #26	Thin Film Evaporation Unit .....	104
Unit #27	Liquid-Liquid Extraction Unit.....	108
Unit #28	Liquefaction Unit.....	112
Unit #29	Lab Pack Consolidation Unit .....	116
Unit #30	Consolidation Booth Unit .....	118
Unit #31	Debris Shredder .....	120
Unit #32	Portable Aerosol Depressurization Unit.....	123
Unit #33	Drum Crushing Unit .....	125
Unit #34	Truck Wash Unit.....	128
Unit #35	Enhanced Truck Park Areas.....	131
Unit #36	Truck Unloading/Unloading Areas .....	134

PART V. SPECIAL CONDITIONS WHICH APPLIES TO THE ENTIRE FACILITY'S STORAGE AND/OR TREATMENT UNIT(S) .....	138
---	-----

PART VI. CORRECTIVE ACTION.....	142
---------------------------------	-----

PART VII. COMPLIANCE SCHEDULE.....	143
------------------------------------	-----

Compliance Schedule Summary Table .....	150
---	-----

## FIGURES

Figure 1, Facility Location Map .....	153
Figure 2, Process Flow Diagram.. .....	154
Figure 3, Site Map - General.....	155
Figure 4, Site Map - Detailed Process Areas .....	156
Figure 5, Site Map - Detailed Storage Buildings .....	157
Figure 6, Site Map - Detailed Tank Farm Q & West Storage Buildings.....	158
Figure 7, Site Map - Detailed Biological Treatment System.....	159
Figure 8, Site Map - Detailed Entire Site.....	160

## TABLES

Table 1, Waste Code Table .....	161
Table 2, Waste Streams and Hazardous Waste Codes.....	166
Table 3, Individual Tanks, Storage Areas, and Process Equipment .....	174

## **PART I. DEFINITIONS**

All terms used in this Permit shall have the same meaning that those terms have in the California Health and Safety Code, Division 20, Chapter 6.5 and Title 22, California Code of Regulations, Division 4.5.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.
2. **"Permittee"** as used in this Permit means the Owner and Operator.
3. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage, resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

For the purpose of implementing corrective action under division 4.5 of the California Code of Regulations, hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

4. **"Offsite Waste"** as used in this Permit means hazardous wastes that are received by the Permittee which is an offsite facility, as defined in California Code of Regulations, title 22, section 66260.10, from various generators. Offsite wastes also include residues resulting from the Permittee's treatment of offsite wastes, as well as hazardous wastes resulting from the cleanup of spills, leaks and drips of offsite wastes.
5. **"Bulking"** as used in the Permit means a process that entails removing inner containers such as bottles, cans, or vials from an outer container, opening the inner containers, and pouring the contents into different United States Department of Transportation (USDOT) approved containers. Bulking also includes pouring contents from containers received as-is into different USDOT-approved containers.
6. **"Repackaging"** as used in this Permit means a process that entails removing inner containers such as bottles, cans, or vials from an outer container and placing them without opening the inner containers, into a different outer container which is a container approved by the United States Department of Transportation. Repackaging also includes placement of smaller containers of waste received as-is into larger outer USDOT-approved containers.

Unless explicitly stated otherwise, all references to items in this Permit shall refer only to items occurring within the same part.

## **PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP**

### **1. OWNER**

The Facility Owner is Romic Environmental Technologies Corporation (hereafter "Owner") which also owns the land where the Facility is located. The Owner is a wholly owned subsidiary of Three Cities Fund III, L.P. located at 650 Madison Avenue, 24th Floor, New York, New York 10022.

### **2. OPERATOR**

The Facility operator is Romic Environmental Technologies Corporation (hereafter "Operator"), a wholly owned subsidiary of Three Cities Fund III, L.P. located at 650 Madison Avenue, 24th Floor, New York, New York 10022.

### **3. PERMITTEE**

The Permittee as used in this Permit means the Facility Owner and Operator listed above.

### **4. LOCATION**

The Facility is located at 2081 Bay Road in East Palo Alto, California approximately one half mile west of San Francisco Bay. The Facility is in an area zoned for both light industrial (M-1) and heavy industrial use (M-2). The Facility consists of seven individual parcels identified on the San Mateo County Assessors Map Parcel Numbers as 063-121-070-5 (zoned M-1), 063-121-390-7 (zoned M-2), 063-121-510-1 (zoned M-1), 063-121-500-1 (zoned M-1), 063-121-110-9 (zoned M-1), 063-121-160-4 (zoned M-1), and 063-121-170-3 (zoned M-1). The seven parcels measure about 14 acres. The majority of the hazardous waste management units are located on parcel 063-121-390-7 which is about 2 acres. The latitude is 37 degrees: 28 minutes: 36 seconds north and the longitude is 122 degrees: 07 minutes: 43 seconds west.

### **5. DESCRIPTION**

The Facility occupies approximately 14 acres of land in the Ravenswood Industrial Park region of East Palo Alto, San Mateo County. The irregularly shaped property is bordered along its easterly boundary by a tidal slough and levee, north beyond which is the Ravenswood Open Space Preserve. The southerly facility boundary is bordered by Bay Road, vacant land and an active salvage yard. A former salvage yard, vacant land and Tara Street border the Facility to the west. See Figure 1, Site Location Map.

The Permittee receives, transfers, stores, and treats hazardous waste, principally waste solvents originating from a variety of industries. The types of waste accepted by the Permittee include waste solvents, waste antifreeze, resins, inks, adhesives, wastewater, and contaminated solids. See Table 1 and Table 2 for a complete list of hazardous

waste codes. These hazardous wastes may be received either in bulk or in containers such as drums, totes, bins, tri-wall boxes, or portable tanks. The Permittee has the capacity to store 793,454 gallons bulk liquid wastes in 116 tanks and treat up to 154,512 gallons per day in 155 process equipment or tanks (Figure 2, Process Flow Diagram). The Permittee also has the capacity to store up to 317,355 gallons of containerized waste in six (6) storage areas, and 320 cubic yards of solid waste in bins located in designated areas throughout the Facility. See Table 3 for the list of individual tanks, storage areas, and process equipment.

Treatment processes include both chemical and physical. The hazardous waste handling activities include the transfer of waste from containers and tanker trucks to other containers, tanker trucks and tanks. The Permittee stores and treats waste solvents and waste antifreeze by fractionation, vacuum pot distillation, or thin film evaporation. The Permittee blends hazardous waste with high energy value into alternative fuel using the liquefaction process, grinders, and blending tanks. The blended alternative fuel is then sent out of state to cement kilns for energy recovery. A limited amount of corrosive waste is neutralized in tanks. Wastewater with organics and inorganics are treated in the wastewater treatment units to pretreatment standards set by the Palo Alto Regional Water Quality Control Plant, a publicly owned treatment works (POTW). Miscellaneous hazardous waste management processes include management of lab packs, contaminated drums, contaminated tanker trucks, aerosol cans, and other contaminated solids. The Permittee also generates its own hazardous wastes that are either treated on-site or disposed of at an authorized off-site hazardous waste Facility.

The Permittee was issued a Permit by the California Department of Health Services, DTSC's predecessor agency, in 1986 for hazardous waste treatment, which was later modified in 1990, and a Permit by the United States Environmental Protection Agency pursuant to the Resource Conservation and Recovery Act (RCRA) for hazardous waste storage in 1992. This Permit will authorize new treatment, additional storage capacity, and new activities. Some of these proposed waste management units currently exist at the Facility and some proposed units will be purchased and installed in accordance with design plans and specifications as approved by DTSC. The following units are not included in the previous permits, but are covered by this Permit:

**PREVIOUSLY NON-PERMITTED PROCESS UNITS:**

- 1) an existing tanker truck wash,
- 2) two existing drum crushers,
- 3) existing tanks for additional hazardous waste storage or treatment,
- 4) an existing shredder unit,
- 5) a high temperature unit, and
- 6) an ultraviolet oxidation unit, carbon adsorption unit, two ion exchange resin beds, two sand filters, and an effluent tank for wastewater treatment.

This permit also authorizes the construction, reinstallation, modification, designation, and use of the following units:

- 1) The construction of a new tank farm (Tank Farm E) to accommodate the installation of five (5) new tanks that were previously permitted in the 1992 Permit but never constructed, for fuel blending operations,
- 2) The construction of a new tank farm (Tank Farm S) to accommodate the installation of four (4) new tanks for storage and inorganic treatment of alkaline solutions,
- 3) The construction of a new waste Consolidation Booth,
- 4) The construction of a new Drum Pumping Area,
- 5) The use of a new Portable Aerosol Can Depressurization Unit,
- 6) The installation of six (6) new tanks, five of which were previously permitted in the 1992 Permit, in existing Tank Farm Q,
- 7) The installation of two (2) new tanks that were previously permitted in 1992 Permit but never constructed in existing Tank Farm D,
- 8) The installation of nine (9) replacement tanks in Tank Farm "CLR"
- 9) The modification of an existing maintenance building to accommodate the installation of two new tank farms (Tank Farm F and Tank Farm T), and the installation of eight (8) new tanks, a filter press, and a stabilization unit (roll-off bin). Four out of the eight tanks were previously permitted in the 1992 Permit but never constructed in Tank Farm F.
- 10) The installation of a new Reboiler and column in Fractionation Unit.
- 11) The modification of truck parking areas for waste loading/unloading, and
- 12) The designation of new roll-off bin storage areas for solid hazardous waste storage.

6. FACILITY SIZE AND TYPE FOR FEES

The Facility is categorized as a Large Treatment and a Large Storage facility for purposes of Health and Safety Code section 25205.19.



### **PART III. GENERAL CONDITIONS**

#### **1. PERMIT APPLICATION DOCUMENTS**

The Part "A" Application and the Part "B" Application, dated November 2001 and revised in April 2005, are hereby approved and made a part of this Permit by reference. The Approved Part "B" Application consists of the initial Operation Plan dated November 2001 with subsequent revisions (Operation Plan). The latest revision is April 2005.

#### **2. EFFECT OF PERMIT**

- (a) The Permittee shall comply with the provisions of the Health and Safety Code and the regulations adopted thereto, including Division 4.5 of Title 22, California Code of Regulations. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.
- (b) The Permittee is permitted to treat and store hazardous wastes listed in Table 1 and Table 2 in accordance with the conditions of this Permit. Any treatment or storage of hazardous wastes not specifically authorized in this Permit is strictly prohibited
- (c) Compliance with the terms of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.
- (d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.
- (e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.
- (f) Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (California Code of Regulations, title 22, section 66270.43).

- (g) In case of conflicts between the Operation Plan and the Permit, the Permit conditions take precedence.
- (h) This Permit includes and incorporates by reference any waste discharge requirements issued by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards and any conditions imposed pursuant to the Water Code, section 13227.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

An Environmental Impact Report has been prepared for this project in accordance with the requirements of Public Resources Code Section 21000 et seq. and the CEQA Guidelines, Article 7 of Title 14, California Code of Regulations.

4. WASTE MINIMIZATION CERTIFICATION

Pursuant to Health and Safety Code section 25202.9, the Permittee shall certify annually, by March 1 for the previous year ending December 31, that:

- (a) The Facility has a program in place to reduce the volume and toxicity of all hazardous wastes listed in Section C of the Operation Plan, that are generated by the Facility operations to the degree, determined by the Permittee to be economically practicable.
- (b) The method of storage or treatment is the only practicable method or combination of methods currently available to the Facility which minimizes the present and future threat to human health and the environment.

The Permittee shall make this certification, in accordance with California Code of Regulations, title 22, section 66270.11. The Permittee shall submit the certification to the Chief of the Standardized Permitting and Corrective Action Branch and shall record and maintain onsite such certification in the facility Operating Record.

5. WASTE MINIMIZATION CONDITIONS

- (a) The Permittee shall comply with the Hazardous Waste Source Reduction and Management Review Act (SB 14) requirements that are specified in the Health and Safety Code sections 25244.19, 25244.20 and 25244.21, and any subsequent applicable statutes or regulations promulgated there under.

This would include submittal of SB 14 documents to DTSC upon request. DTSC may require the Permittee to submit a more detailed status report explaining any deviation from, or changes to, the approved waste minimization plan.

## **PART IV. PERMITTED UNITS AND ACTIVITIES**

This Permit authorizes operation only of the Facility units and activities listed below. The Permittee shall not treat or store hazardous waste in any unit other than those specified in this Part IV. Any modifications to a unit or activity authorized by this Permit requires the written approval of DTSC in accordance with the permit modification procedures set forth in Title 22, California Code of Regulations.

### **UNIT NAME:**

Unit #1 - North Storage Building

### **LOCATION:**

Located next to the South Storage Building (Figures # 3, #5 & #8)

### **ACTIVITY TYPE:**

Container Storage

Container Transfer (includes bulking and repackaging)

A portable aerosol depressurizer can be located in this Unit (see Unit #32 Portable Aerosol Depressurization Unit for details)

A fixed drum crusher is located in this Unit; a portable drum crusher can also be located in this Unit (see Unit #33 Drum Crushing Unit for details)

### **ACTIVITY DESCRIPTION:**

Storage of hazardous waste in containers such as 55-gallon drums, 30-gallon drums totes up to 350 gallons, tri-wall boxes, 5-gallon pails, supersacks, and a roll-off bin prior to transfer, treatment, or transportation offsite.

Containers received at the Facility can vary in size and type and may require bulking or repackaging prior to on-site treatment or off-site shipment for final disposal. Before bulking or repackaging, compatibility tests are required. Employees performing bulking must work in ventilated areas and use the appropriate personal protective equipment. Prior to shipment, absorption materials (e.g. sawdust, Floor Dri®) may be used to remove any residual free liquids present in containers. Although the repackaging of lab packs is primarily conducted in Unit #5 (West Storage Building #2), some repackaging and storage may occur in this Unit as a result of activities associated with Unit #30 (Consolidation Booth Unit).

The roll-off bin allowed in this unit is not included as part of Unit #7 Bin Storage Areas.

### PHYSICAL DESCRIPTION:

The North Storage Building is about 100 feet in length and 50 feet wide. The area consists of concrete slab constructed of nominal 6" concrete with #6 rebar spaced 12" on center each way. The containment slab is surrounded on three sides by metal sheeting walls atop one foot high concrete dike or berm. The east end, the fourth side, is open and ramped to the height of the dike. The west end wall is partially open on the top for ventilation. The minimum berm height is seven (7) inches. The building has a roof and is protected by a sprinkler system using Aqueous Film Forming Foam.

### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total storage in containers is 45,650 gallons, including one roll-off bin up to 40 cubic yards. The container type and size may vary.

### WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU> 5,000, any semi-solid or solid organic bearing material with BTU value> 5,000
6	Wastewater
8	Miscellaneous metal bearing waste
9	Non-pumpable sludges, filter cake, contaminated soils
10	Solid fuel such as contaminated rags, wipes, wood and other debris having high BTU value, reacted resins, spill cleanup residuals
11	Solids for consolidation and landfill such as solid corrosive materials, sodium bicarbonate, absorbent with hydrocarbons, plating sludges, baghouse dust, petroleum contaminated soils
12	Solids for consolidation and incineration such as packaged laboratory chemicals (lab packs), contaminated debris, paint related materials, mill waste, process waste
13	Solids such as contaminated rags, wipes, wood plastic containers, and other debris having medium BTU value

Waste Stream Number	Waste Stream
14	Aerosol cans
15	Contaminated containers
17	Lab Packs
18	Storage and Offsite Transfer

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

- 1) To maintain thirty-six (36) inch aisle space, the maximum number of fifty-five (55) gallons drums stored within this unit shall be 830 drums.
- 2) The maximum volume of hazardous waste stored in containers within this unit shall be 45,650 gallons, including only one roll-off bin with a maximum capacity of 40 cubic yards.
- 3) The Permittee shall not store liquid corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22. The Permittee can only store liquid corrosive waste in lab-packs.
- 4) The Permittee shall not store free liquids in the roll-off bin.
- 5) The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h) and 1(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #2 - South Storage Building

LOCATION:

Located at between the North Storage Building and the Sampling Area (Figures # 3, #5 & #8)

ACTIVITY TYPE:

Container Storage

A portable aerosol depressurizer can be located in this Unit (see Unit #32 Portable Aerosol Depressurization Unit for details)

A portable drum crusher can be located in this Unit (see Unit #33 Drum Crusher Unit for details)

ACTIVITY DESCRIPTION:

Storage of hazardous waste in containers such as 55-gallon drums, 30-gallon drums totes up to 350 gallons, tri-wall boxes, 5-gallon pails, and super-sacks prior to transfer, treatment, or transportation offsite. Waste containers, as a result of consolidation activities associated with Unit #30 (Consolidation Booth Unit) may be stored in this Unit.

PHYSICAL DESCRIPTION:

The South Storage Building is 178 feet in length and 78 feet wide. The area consists of concrete slab constructed of nominal 6" concrete with #6 rebar spaced 12" on center each way. The containment slab is surrounded on three sides by metal sheeting walls atop a one-foot dike or berm. The south end, the fourth side which faces the Sampling Area, is open and ramped to the height of the dike. The minimum berm height is 8". This building has a separately bermed Isolation Row about four feet wide by 15 feet long that can accommodate 24 drums and is used to segregate incompatible wastes or keep other material separated. The building has a roof and is protected by a sprinkler system using Aqueous Film Forming Foam.

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total storage in containers is 140,580 gallons. The container type and size may vary.

WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU> 5,000, any semi-solid or solid organic bearing material with BTU value> 5,000
6	Wastewater
8	Miscellaneous metal bearing waste
9	Non-pumpable sludges, filter cake, contaminated soils
10	Solid fuel such as contaminated rags, wipes, wood and other debris having high BTU value, reacted resins, spill cleanup residuals
11	Solids for consolidation and landfill such as solid corrosive materials, sodium bicarbonate, absorbent with hydrocarbons, plating sludges, baghouse dust, petroleum contaminated soils
12	Solids for consolidation and incineration such as packaged laboratory chemicals (lab packs), contaminated debris, paint related materials, mill waste, process waste
13	Solids such as contaminated rags, wipes, wood plastic containers, and other debris having medium BTU value
14	Aerosol cans
15	Contaminated containers
17	Lab Packs
18	Storage and Offsite Transfer

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS :

1. To maintain thirty-six (36) inch aisle space, the maximum number of fifty-five (55) gallons drums stored within this unit shall be 2,556 drums.
2. The maximum volume of hazardous waste stored in containers within this unit shall be 140,580 gallons.
3. The Permittee shall not store roll-off bins in South Storage Building.
4. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
5. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h) and 1(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.



UNIT NAME:

Unit #3 - Sampling Area

LOCATION:

Sampling Area is located south of the South Storage Building (Figures # 3, #5 & #8)

ACTIVITY TYPE:

Container Storage and Sampling

A portable aerosol depressurizer can be located in this Unit (see Unit #32 Portable Aerosol Depressurization Unit for details)

ACTIVITY DESCRIPTION:

Storage of hazardous waste in containers such as 55-gallon drums, 30-gallon drums, totes up to 350 gallons, portable tanks up to 500 gallons, tri-wall boxes, 5-gallon pails, or supersacks prior to transfer, treatment, or transportation offsite. Sampling of incoming hazardous waste is conducted in this Unit as part of the hazardous waste acceptance procedures.

PHYSICAL DESCRIPTION:

The Sampling Area is 124 feet in length and 78 feet wide. The area consists of concrete slab constructed of nominal 6" concrete with #6 rebar spaced 12" on center each way. The containment slab is surrounded on the south side by a metal sheeting wall. The north end is open and faces the South Storage Building and the west end is open and faces out to the proposed Drum Pumping Area. The minimum berm height is 9". The Sampling Area has a roof and is protected by a sprinkler system using Aqueous Film Forming Foam.

The Sampling Area has a segregated secondary containment area within the building at the western end referred to as Row 80. Row 80 has a berm that separates this area from the rest of the building. Incompatible waste shall be stored in Row 80 or on containment pallets with a sump capacity of sixty (60) gallons or more that can hold up to four (4) standard drums at a time.

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total storage in containers is 40,755 gallons. The container type and size may vary.

WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU> 5,000, any semi-solid or solid organic bearing material with BTU value> 5,000
6	Wastewater
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
8	Miscellaneous metal bearing waste
9	Non-pumpable sludges, filter cake, contaminated soils
10	Solid fuel such as contaminated rags, wipes, wood and other debris having high BTU value, reacted resins, spill cleanup residuals
11	Solids for consolidation and landfill such as solid corrosive materials, sodium bicarbonate, absorbent with hydrocarbons, plating sludges, baghouse dust, petroleum contaminated soils
12	Solids for consolidation and incineration such as packaged laboratory chemicals (lab packs), contaminated debris, paint related materials, mill waste, process waste
13	Solids such as contaminated rags, wipes, wood plastic containers, and other debris having medium BTU value
14	Aerosol cans
15	Contaminated containers
17	Lab Packs
18	Storage and Offsite Transfer

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS :

1. To maintain thirty-six (36) inch aisle space, the maximum number of fifty-five (55) gallons drums stored within this unit shall be 741 drums.
2. The maximum volume of hazardous waste stored in containers within this unit shall be 40,755 gallons.
3. The Permittee shall not store roll-off bins in the Sampling Area.
4. The Permittee shall not stack containers in the Sampling Area.
5. The Permittee may use Row 80 or containment pallets as physical barriers to separate incompatible waste in this Unit to facilitate sampling activities. The term "incompatible waste" as used in this Permit is defined in California Code of Regulations, title 22, section 66260.10.
6. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h) and 1(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #4 -West Storage Building # 1

LOCATION:

West Storage Building #1 is located at the south end of Tank Farm Q (Figures # 3, #6 & #8)

ACTIVITY TYPE:

Container Storage and Sampling

A portable aerosol depressurizer can be located in this Unit (see Unit #32 Portable Aerosol Depressurization Unit for details)

A portable drum crusher can be located in this Unit (see Unit #33 Drum Crusher Unit for details)

ACTIVITY DESCRIPTION:

Storage of hazardous waste in containers such as 55-gallon drums, or 500-gallon portable tanks prior to transfer, treatment, or transportation offsite. Sampling of incoming hazardous waste is conducted in this Unit as part of the hazardous waste acceptance procedures.

PHYSICAL DESCRIPTION:

The West Storage Building #1 measures 60 feet by 30 feet and is divided into two identical bays. The bays are separated from each other with a 7-foot high center dividing wall that provides for segregated secondary containment of the storage of incompatible hazardous waste. Each bay consists of concrete slab constructed of nominal 6" concrete with #6 rebar spaced 12" on center each way and drains to a sump. The containment slab for both bays is surrounded on three sides by metal sheeting walls. The south end is open. The minimum berm height is 8". West Storage Building #1 has a roof and is protected by a water sprinkler system.

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total storage in containers is 18,480 gallons. The container type and size may vary.

WASTE TYPES:

Waste Stream Number	Waste Stream
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
8	Miscellaneous metal bearing waste

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. To maintain thirty-six (36) inch aisle space, the maximum number of fifty-five (55) gallons drums stored within this unit shall be 336 drums.
2. The maximum volume of hazardous waste stored in containers within this unit shall be 18,480 gallons.
3. The Permittee shall not store roll-off bins in West Storage Building #1.
4. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 9(h) and 9(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit # 5 - West Storage Building # 2

LOCATION:

The Unit is located inside the West Storage Building #2 excluding the Lab Pack Consolidation Area and Non Hazardous Waste Storage Area). The West Storage Building is located at the west side of the Tank Farm Q (Figures # 3, #6 & #8).

ACTIVITY TYPE:

Container Storage and Sampling

Container Transfer (Repackaging of lab packs and loose packs)

A portable aerosol depressurizer can be located in this Unit (see Unit #32 Portable Aerosol Depressurization Unit for details)

A portable drum crusher can be located in this Unit (see Unit #33 Drum Crusher Unit for details)

ACTIVITY DESCRIPTION:

Storage of hazardous waste in containers such as 55-gallon drums, 30-gallon drums totes up to 350 gallons, tri-wall boxes, 5-gallon pails, or supersacks prior to transfer, treatment, or transportation offsite. Sampling of incoming hazardous waste is conducted in this Unit as part of the hazardous waste acceptance procedures.

The repackaging of lab packs or loose packs into other containers with no additional handling occurs in this Unit. Lab packs and loose packs are packages consisting of small inner containers packaged within larger outer USDOT compliant containers.

Unit #5 does not include bulking activities which occur in Unit #29 (Lab Pack Consolidation Unit) contiguous of Unit #5.

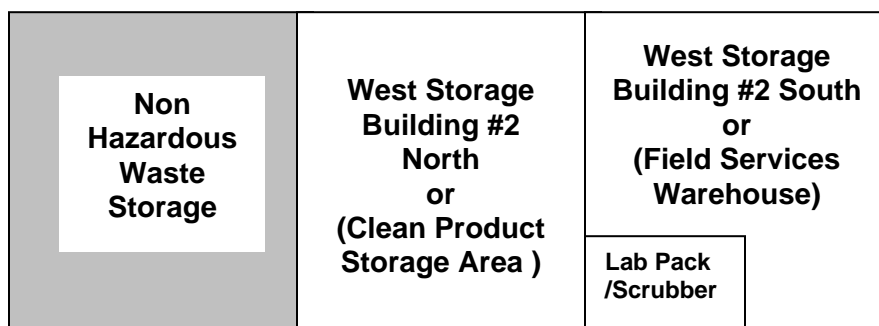
PHYSICAL DESCRIPTION:

The West Storage Building #2 is comprised of three separate compartments: 1) West Storage Building #2 South which may also be referred to as the Field Services Warehouse; 2) West Storage Building #2 North which may also be referred to as the Clean Product Storage Area; 3) and a storage area for non-hazardous waste (see diagram below). The West Storage Building #2 South also houses the Lab Pack Consolidation Unit (Unit #29) which is also referred to as the Scrubber Unit.

Hazardous waste may be stored or transferred in both the West Storage Building #2 North and South (excluding the Lab Consolidation Unit). These two areas together

measure 65 feet in length by 125 feet in width and consist of concrete slab constructed of nominal 6" concrete with #6 rebar spaced 12" on center each way. The containment slab is surrounded on three sides by a metal sheeting walls and an interior wall. The east end of the building is open. The minimum berm height is eight (8) inches. The West Storage Building #2 has a roof and is protected by a sprinkler system using Aqueous Film Forming Foam.

#### WEST STORAGE BUILDING #2



**N** ←

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total storage in containers is 65,890 gallons. The container type and size may vary.

#### WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
12	Solids for consolidation and incineration such as packaged laboratory chemicals (lab packs), contaminated debris, paint related materials, mill waste, process waste

Waste Stream Number	Waste Stream
17	Lab Packs
18	Storage and Offsite Transfer

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. To maintain thirty-six (36) inch aisle space, the maximum number of fifty-five (55) gallons drums stored within this unit shall be 1,198 drums.
2. The maximum volume of hazardous waste stored in containers within this unit shall be 65,890 gallons.
3. The Permittee shall not store roll-off bins in West Storage Building #2.
4. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h) and 1(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.



UNIT NAME:

Unit #6 - Drum Pumping Area

LOCATION:

Located on the west side of the Sampling Area (Figures # 3, #5 & #8)

ACTIVITY TYPE:

Container Storage  
Container Transfer (Bulking only)

ACTIVITY DESCRIPTION:

Storage and transfer of hazardous waste from 55-gallon drums, 30-gallon drums, 5-gallon pails, or 350-gallon totes into tanker trucks only for the movement of hazardous waste from containers to tank storage or tank treatment. Vacuum trucks and pumps are used to transfer waste. The capacity of this Unit is equal to the capacity of the tanker truck in which the waste is bulk transferred and the drums that are staged for pumping.

PHYSICAL DESCRIPTION:

The Drum Pumping Area is an irregularly shaped area adjacent to the west side of the Sampling Area. It is approximately 10 feet wide by 60 feet long. It is sloped and has a berm that varies from 4 inches to 16 inches high.

MAXIMUM PERMITTED CAPACITY:

Only one tank trucker, not exceeding 6,000-gallons, can park in the Drum Pump Area.

WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater

Waste Stream Number	Waste Stream
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
8	Miscellaneous metal bearing waste

#### HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

#### UNIT SPECIFIC SPECIAL CONDITIONS

1. The Permittee shall have no more than one tanker truck parked in this Unit to facilitate the transfer, for up to twenty-four (24) hours, of containerized waste to other units.
2. The Permittee shall inspect the Drum Pumping Area daily when a tanker truck is used in this Unit. The Permittee shall certify annually the integrity of the tanker trucks used in this Unit meets USDOT standards.
3. The Permittee shall place absorbent booms as containment during container transfers in this Drum Pumping Area until such time as the permanent enhanced secondary containment is completed and approved by DTSC.
4. The Permittee shall prior to transfer into tanker truck assure the compatibility of the waste.
5. The Permittee shall maintain aisle spacing for container storage no less than two feet (24 inches) due to the small size of the Unit.
6. The Permittee shall construct the enhanced secondary containment areas for the unit according to Section VII Compliance Schedule items 8(b) and 8(c).

#### AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #7 - Bin Storage Areas

LOCATION:

There are five locations designated as Bin Storage Areas (Figures #5 & #6)

- 1) Tank Farm F
- 2) North Roll-off Storage Area (east of South Storage Building)
- 3) Consolidation Area (north of North Storage Building near the proposed Consolidation Booth)
- 4) West Roll-off Storage Area (west of Tank Farm Q)
- 5) East Roll-off/End Dump Storage Area (adjacent to southeast of the Liquefaction Unit)

The Roll-off Bin in the North Storage Building is not part of this unit.

ACTIVITY TYPE:

Container Storage and  
Container Transfer (only allowed in Tank Farm F and for Bulking only)

ACTIVITY DESCRIPTION:

Solid hazardous waste can be received in bins or end-dump trucks and stored in this Unit for offsite transportation.

Waste may be bulked from the filter press into bins for stabilization. The roll-off bin in Tank Farm F will also be authorized for stabilization treatment as component of the Inorganic Treatment Unit – Tank Farm F (see Unit #20 for treatment activity information).

PHYSICAL DESCRIPTION:

Roll-off bins or end dump trucks are used for the onsite storage of solid hazardous waste. There will be three types of bins used onsite. One type is open top bins that can be covered with a tarp for use in handling low organic content (less than 500 parts per million by weight (ppmw) total volatile organic compounds) solid waste. The second type will have a closeable cover and will be used for most waste types. The third type of bin will be NESHAP roll-off bins. These NESHAP bins are specially equipped with gaskets and closures to meet the benzene waste operations requirements for transport subject to Code of Federal Regulations, title 40, part 61 subpart FF. Roll-off bins or end dump trucks may vary in capacity from 10 cubic yards to 40 cubic yards.

- 1) Tank Farm "F" – up to one bin or 20 cubic yards
- 2) North Roll-off Storage Area –up to two bins or end dumps or 80 cubic yards

- 3) Consolidation Area - up to two bins or end dumps or 80 cubic yards
- 4) West Roll-off Storage Area - up to three bins or end dumps or 120 cubic yards
- 5) East Roll-off/End Dump Storage Area - up to one bin or end dumps or 40 cubic yards

Each of these locations has an asphalt or concrete surface with sufficient structural strength to handle stresses associated with stationary bins. The locations will be delineated by painted lines and signed appropriately.

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total storage in roll-off bins is 320 cubic yards in eight (8) roll-off bins. The type and size of the roll-off bins may vary.

WASTE TYPES:

Waste Stream Number	Waste Stream
10	Solid fuel such as contaminated rags, wipes, wood and other debris having high BTU value, reacted resins, spill cleanup residuals
11	Solids for consolidation and landfill such as solid corrosive materials, sodium bicarbonate, absorbent with hydrocarbons, plating sludges, baghouse dust, petroleum contaminated soils
12	Solids for consolidation and incineration such as packaged laboratory chemicals (lab packs), contaminated debris, paint related materials, mill waste, process waste
13	Solids such as contaminated rags, wipes, wood plastic containers, and other debris having medium BTU value
14	Aerosol cans
15	Contaminated containers

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall only transfer or store hazardous waste that does not contain free liquids in the Bin Storage Area.
2. The Permittee shall use bins or end dump trailers with a maximum capacity of no more than 40 cubic yards each to store hazardous waste.

3. The Permittee shall use only one bin with a maximum capacity of no more than 20 cubic yards to store waste in Tank Farm F.
4. The Permittee shall not store more than a total of eight (8) bins (320 cubic yards) in all five of the locations identified as Bin Storage Areas.
5. The Permittee shall mark and sign the Bin Storage Areas as Hazardous Waste Storage Areas. The Permittee shall submit photographs to DTSC prior to operating the new unit. The Permittee is not authorized to operate the units until DTSC issues a written approval.

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #8 - Tank Farm A

LOCATION:

Tank Farm A is located east of the Production Area (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in eleven (11) tanks  
Tank Storage in fifteen (15) tanks.

Thin Film Evaporators: Tank 1, Tank 4, Tank 8, and Tank 12 will also be authorized as treatment tanks to be used as components of the Thin Film Evaporation Unit (see Unit #26 for treatment activity information for these tanks).

ACTIVITY DESCRIPTION:

Fuel Blending hazardous waste with high or low solids: Fuel blending is the combination of different fuel grade waste streams to produce an alternative fuel that is usable by a boiler or industrial furnace. Incoming organic waste streams with sufficient British Thermal Unit (BTU) and/or organic content are analyzed for the appropriate parameters. Compatible wastes are pumped from tank trucks or from containers and are commingled into the fuel blending tanks. If the waste contains high solids, it is transferred into one or more of the agitated tanks. If the waste contains low solids it can be processed in either a tank with or without an agitator.

Organic wastes that are fuel-blended by the Permittee are received from off-site generators or from onsite treatment processes. Some organic solvents require additional processing before they can be blended for fuel. Distillation still bottoms, vacuum pot bottoms, and liquefaction waste are the principal high solid wastes that are processed in tanks with agitators. Light end materials from distillation, vacuum pots and thin film evaporators are the low solid wastes that are processed. Wastewater generated from fuel blending is further processed in the biological treatment system.

Storage: These fuel blending tanks also serve as storage tanks for both organic liquid waste and aqueous wastewater.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm A has secondary containment that is about 60.8 feet by 42.6 feet long. The tank farm is shaped like a rectangle with an irregular southwest corner. The concrete block wall is 8 inches thick and 28 inches high. The available secondary containment for tank storage is 40,799 gallons which is greater than the volume of the largest tank plus the required rainfall amount and accounts for the displacement of tank footprint. With the issuance of this permit, the tank farm shall be coated to improve impermeability.

Tank Descriptions: Tank 1, Tank 4, Tank 8 and Tank 12 have elliptical or dome tops and bottoms and are vertically installed on legs.

Tank 2, Tank 3, Tank 5, Tank 6, Tank 7, Tank 9, Tank 10 and Tank 11 all have cone heads and a three-inch slope across the bottom that allows for the tanks to completely drain. These tanks are installed vertically and rest on the tank farm foundation.

Tanks K, Tank L, and Tank M are equipped with agitators to assist in the fuel blending of high solid waste to ensure solids remain in suspension. These tanks are suspended vertically in a structural frame to a height of about 22 feet. The tanks are plumbed with valves, and pipes which permit filling and offloading from the bottom of the tanks. These vertical cylindrical tanks have elliptical tops and hemispherical bottoms. Physical descriptions for the subject tanks are included in Table IV-1.

Table IV-1

Tank Number	Permitted Capacity (gallons)	Treatment	Diameter (ft, inches)	Height <sup>(2)</sup> (ft, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 1 <sup>(1)</sup>	4200	TFE	7 feet	16 feet 10 inches	.070	Dome Bottom on legs	Stainless Steel
Tank 2	5093	FB	8 feet 6 inches	12 feet	.066	Flat Bottom	Stainless Steel
Tank 3	5093	FB	8 feet 6 inches	12 feet	.066	Flat Bottom	Stainless Steel
Tank 4 <sup>(1)</sup>	4555	TFE	9 feet 6 inches	11 feet 4 inches	.050	Dome Bottom on legs	Carbon Steel
Tank 5	6360	FB	9 feet 6 inches	12 feet	.070	Flat Bottom	Stainless Steel
Tank 6	5093	FB	8 feet 6 inches	12 feet	.066	Flat Bottom	Stainless Steel
Tank 7	5093	FB	8 feet 6 inches	12 feet	.066	Flat Bottom	Stainless Steel
Tank 8 <sup>(1)</sup>	4555	TFE	9 feet 6 inches	11 feet 4 inches	.050	Dome Bottom on legs	Carbon Steel
Tank 9	6360	FB	9 feet 6 inches	12 feet	.070	Flat Bottom	Stainless Steel
Tank 10	5093	FB	8 feet 6 inches	12 feet	.066	Flat Bottom	Stainless Steel
Tank 11	5093	FB	8 feet 6 inches	12 feet	.072	Flat Bottom	Stainless Steel

Tank Number	Permitted Capacity (gallons)	Treatment	Diameter (ft, inches)	Height <sup>(2)</sup> (ft, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 12 <sup>(1)</sup>	4555	TFE	9 feet 6 inches	11 feet 4 inches	.050	Dome Bottom on legs	Carbon Steel
Tank K	9230	FB	10 feet 6 inches	22 feet	.086	Suspended	Carbon Steel
Tank L	9230	FB	10 feet 6 inches	22 feet	.085	Suspended	Carbon Steel
Tank M	9230	FB	10 feet 6 inches	22 feet	.085	Suspended	Carbon Steel
TOTAL	88,833						

(1) Indicates that the tank is an existing tank but not previously permitted for hazardous waste storage or treatment

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

FB = Fuel Blending

TFE = Unit # 26 - Thin Film Evaporator Unit

Table IV-2

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm A Fuel Blending low solids only	10.0	Tank 2	
	10.0	Tank 3	
	10.0	Tank 5	
	10.0	Tank 6	
	10.0	Tank 7	
	10.0	Tank 9	
	10.0	Tank 10	
	10.0	Tank 11	
Tank Farm A Fuel Blending high and low solids	10.0	Tank K	Agitators
	10.0	Tank L	Agitators
	10.0	Tank M	Agitators
TOTAL	110.0		

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank treatment is 110.0 gallons per minute.

The maximum capacity of total tank storage is 88,833 gallons.

For individual tanks, see Table IV-1 and Table IV-2 above.

#### WASTE SOURCES:

Waste from Liquefaction Unit

Waste from Thin Film Evaporation Unit



Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Lab Pack Consolidation Unit  
Waste from Consolidation Booth Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage or Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU > 5,000, any semi-solid or solid organic bearing material with BTU value > 5,000

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in

Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the tanks according to Section VII, Compliance Schedule items 5(a), 5(e), 7(a), 7(b), 7(d), 9(i), and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.

UNIT NAME:

Unit #9 - Tank Farm B

LOCATION:

Tank Farm B is located directly east of Tank Farm A (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery  
Tank Storage in five (5) tanks.

ACTIVITY DESCRIPTION:

See Unit #8 for the description.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm B has a rectangular shaped secondary containment that is about 60.8 feet by 14.8 feet long. The concrete block wall is 8 inches thick and 28 inches high. The available secondary containment for tank storage is 16,143 gallons which is greater than the volume of the largest tank plus the required rainfall amount. The tanks are elevated and there is no displacement of tank footprints. With the issuance of this permit the tank farm shall be coated to improve impermeability.

Tanks: Tanks R91, R92, R93, R94, and R95 are cylindrical tanks elevated off the ground and are installed vertically to a height of 17 feet. The tanks have elliptical tops and hemispherical bottoms. The tanks are plumbed with valves and pipes that permit filling and offloading from the bottom of the tanks. These tanks are equipped with agitators to assist in the fuel blending process and to ensure solids remain in suspension. Physical descriptions for the tanks are tabulated in Table IV-3 below.

Table IV-3

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank R91	4743	8 feet 6 inches	17 feet	.070	Suspended	Stainless Steel
Tank R92	4743	8 feet 6 inches	17 feet	.070	Suspended	Stainless Steel
Tank R93	4743	8 feet 6 inches	17 feet	.070	Suspended	Stainless Steel
Tank R94	4743	8 feet	17 feet	.070	Suspended	Stainless Steel

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
		6 inches				
Tank R95	4743	8 feet 6 inches	17 feet	.070	Suspended	Stainless Steel
TOTAL	23,715					

(1) Height is defined as the total installed height (not including the height of any dome or cone top).

Table IV-4

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm B Fuel Blending high and low solids	10.0	Tank R91	Agitators
	10.0	Tank R92	Agitators
	10.0	Tank R93	Agitators
	10.0	Tank R94	Agitators
	10.0	Tank R95	Agitators
TOTAL	50.0		

**MAXIMUM PERMITTED CAPACITY:**

The maximum capacity of total tank storage is 23,715 gallons.  
The maximum capacity of total tank treatment is 50 gallons per minute.  
For individual tanks, see Table IV-3 and Table IV-4.

**WASTE SOURCES:**

Waste from Liquefaction Unit  
Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Lab Pack Consolidation Unit  
Waste from Consolidation Booth Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage or Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU> 5,000, any semi-solid or solid organic bearing material with BTU value> 5,000

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.

2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(g), 1(j), 9(i), and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.

UNIT NAME:

Unit #10 - Tank Farm CLR

LOCATION:

Tank Farm CLR is located east of the Production Area and between Tank Farm MNO and Tank Farm A (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in sixteen (16) tanks  
Tank Storage in sixteen (16) tanks.

Tank T-24 and Tank T-25 are located in Tank Farm CLR but they are also components of the Vacuum Pot Distillation Unit (see Unit # 24 for storage and treatment activity information for these tanks).

ACTIVITY DESCRIPTION:

Fuel Blending Hazardous Waste with Low Solids: Fuel blending is the combination of different fuel grade waste streams to produce an alternative fuel that is usable by a boiler or industrial furnace. Incoming organic waste streams with sufficient British Thermal Unit (BTU) and/or organic content are analyzed for the appropriate parameters. Compatible wastes are pumped from tank trucks or from containers and are commingled into the fuel blending tanks. The waste contains low solids and is processed in these tanks without agitators.

Organic wastes that are fuel-blended by the Permittee are received from off-site generators or from onsite treatment processes. Some organic solvents require additional processing before they can be blended for fuel. Light end materials from distillation, vacuum pot and thin film processes are the principal wastes that are processed here.

Storage: These fuel blending tanks also serve as storage tanks for both organic liquid waste and aqueous wastewater.

PHYSICAL DESCRIPTION:

Tank Farm CLR is comprised of Tank Farm C, Tank Farm L, and Tank Farm R. This Unit may also be referred to in the Operation Plan by the name of the individual tank farms that comprise Tank Farm CLR. These names include Tank Farm C, Tank Farm L, Tank Farm R, or Tank Farm CR.

Secondary Containment: Tank Farm CLR has an approximate rectangular shaped secondary containment. The secondary containment for Tank Farms C and R is about 30 feet wide by 41.3 feet long. The secondary containment for Tank Farm L is about

29.8 feet wide by 29.5 feet long. The surrounding concrete block wall is eight (8) inches thick and 26 inches high. The current available secondary containment for tank storage is about 20,078 gallons for Tank Farm C and Tank Farm R which both share the available secondary containment. Tank Farm L has a current available secondary containment of 29,940 gallons and is separated by a wall from Tank Farm C. The available secondary containment is greater than the volume of the largest tank plus the required rainfall amount. Most of the tanks are elevated and there is allowance for the displacement of tank footprints.

Tanks: Tank 44, Tank 45, Tank 46, and Tank 47 all have cone heads and a three inch slope across the bottom that allows for the tanks to completely drain. These vertical tanks each have 8,800 gallon capacity and are installed on the slab foundation. Tank 48, Tank 49, and Tank 50 all have cone heads and flat bottoms with a capacity of 4,003 gallons installed on legs. All seven vertical tanks are plumbed with valves, and pipes which permit filling from the top from process units, but can also be loaded and offloaded from the bottom. Stainless steel tanks numbered 44, 45, 46, 47, 48, 49, and 50 are equipped with ultrasonic level monitors.

Tanks A , B, C, D, E, F, G, H, I and J that were previously authorized in Tank Farm C will be closed in accordance with the approved closure plan. Tank J will not be replaced. These tanks currently range in capacity from 5600 gallons to 6700 gallons. They are vertically installed carbon steel tanks on legs with cone bottoms.

Planned Modifications: With the issuance of this permit, the secondary containment of Tank Farm CLR shall be modified to remove all the interior walls separating the individual Tank Farms. The foundation of former Tank Farm C and Tank Farm R will be modified with an additional 16 inches of reinforced concrete slab approximately 43 feet long by 29 feet wide. The configuration of the secondary containment for Tank Farm CLR will be rebuilt as originally designed except for the removal of the two interior walls that separated the original tank farms. The removal of these interior walls will allow for the installation of new replacement Tanks A, B, C, D, E, F, G, H, and I. The surrounding concrete block wall will be eight (8) inches thick and 26 inches high. The new available secondary containment for the modified tank storage unit will be about 17,250 gallons which is greater than the volume of the largest tank plus the required rainfall amount. The reduction of secondary containment is due to the displacement of the new tank footprints and the new pedestal foundations which displace the available volume. The modified tank farm shall be coated to improve impermeability.

With the issuance of the permit, new stainless steel Tank A, Tank B, Tank C, Tank D, Tank E, Tank F, Tank G, Tank H and Tank I shall be installed vertically. Tank J will not be replaced. The new flat bottom replacement tanks shall each have a capacity of 5,940 gallons. These new tanks will be designed to appropriate industrial tank standards and are compatible with the waste streams that will be stored. Physical description for the subject tanks are tabulated below in Table IV-5.



Table IV-5

Tank Number	Permit Capacity Gallon	Diameter (feet, inches)	Height <sup>(3)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank A	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank B	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank C	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank D	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank E	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank F	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank G	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank H	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank I	5940 <sup>(1)</sup>	7 feet 6 inches	18 feet	TBD	Flat bottom	Stainless Steel
Tank 44 <sup>(2)</sup>	8800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 45 <sup>(2)</sup>	8800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 46 <sup>(2)</sup>	8800	10 feet	15 feet	.091	Flat bottom	Stainless Steel
Tank 47 <sup>(2)</sup>	8800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 48 <sup>(2)</sup>	4000	7 feet 6 inches	16 feet	.065	Cone bottom on legs	Stainless Steel
Tank 49 <sup>(2)</sup>	4000	7 feet 6 inches	16 feet	.065	Cone bottom on legs	Stainless Steel
Tank 50 <sup>(2)</sup>	4000	7 feet 6 inches	16 feet	.068	Cone bottom on legs	Stainless Steel
TOTAL	100,660					

(1) Replacement capacity

(2) Indicates that the tank is an existing tank but previously not permitted for hazardous waste storage or treatment

(3) Height is defined as the total installed height (not including the height of any dome or cone top).

TBD = to be determined upon certification of the new tank

Table IV-6

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm CLR Fuel Blending low solids	10.0	Tank A	None
	10.0	Tank B	None
	10.0	Tank C	None
	10.0	Tank D	None
	10.0	Tank E	None
	10.0	Tank F	None
	10.0	Tank G	None
	10.0	Tank H	None
	10.0	Tank I	None
	10.0	Tank 44	None
	10.0	Tank 45	None
	10.0	Tank 46	None
	10.0	Tank 47	None
	10.0	Tank 48	None
	10.0	Tank 49	None
	10.0	Tank 50	None
TOTAL	1600		

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 100,660 gallons.  
The maximum capacity of total tank treatment is 1,600 gallons per minute.  
For individual tanks, see Table IV-5 and Table IV-6 above.

WASTE SOURCES:

Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage and Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule, items 1(a), 1(j), 5(d), 5(e), 6(a), 6(c), 9(d), 9(i), and 9(j).

4. The Permittee is authorized to install Tanks A, B, C, D, E, F, G, H and I in Tank Farm CLR and shall comply with Section V, Special Condition 26.

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.

UNIT NAME:

Unit #11 - Tank Farm D

LOCATION:

Tank Farm D is located south of Tank Farm A and Tank Farm B (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in two (2) tanks.  
Tank Storage in two (2) tanks.

ACTIVITY DESCRIPTION:

See Unit #8 for the description.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm D has a rectangular shaped secondary containment that is about 14.7 feet wide by 26.7 feet long. The concrete block wall will be 8 inches thick and 30 inches high. The available secondary containment for tank storage will be 5,436 gallons. The available secondary containment is greater than the volume of the largest tank plus the required rainfall amount.

Tanks: Tanks R96 and R97 will be cylindrical tanks and will have cone heads and sloped bottoms. The tanks will be plumbed with valves, and pipes which permit filling and offloading from the bottom of the tanks. Both tanks will include level instrumentation that indicates the liquid level in each tank and temperature gauges. These vertically oriented cylindrical tanks will be fabricated from stainless steel. Physical descriptions for the tanks are tabulated in Table IV-7 below.

Planned Modifications: With the issuance of the permit, Tank R96 and Tank R97 shall be installed. The tank farm will be coated to improve impermeability. Currently there are two unregulated tanks each with a capacity of 11,750 gallons located in Tank Farm D. These two tanks will be removed before the installation of Tanks R96 and R97.

Table IV-7

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank R96 (planned)	4,500	8 feet	11 feet 10 inches	TBD	Flat bottom	Stainless Steel
Tank R97 (planned)	4,500	8 feet	11 feet 10 inches	TBD	Flat bottom	Stainless Steel
TOTAL	9,000					

TBD = to be determined upon certification of the new tank

(1)Height as proposed (not including the height of any dome or cone top).

Table IV-8

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm D Fuel Blending high and low solids	10.0	Tank R96 (planned)	No Agitators
	10.0	Tank R97 (planned)	No Agitators
TOTAL	20.0		

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 9,000 gallons.

The maximum capacity of total tank treatment is 20 gallons per minute.

For individual tanks, see Table IV-7 and Table IV-8.

#### WASTE SOURCES:

Waste from Liquefaction Unit  
Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Lab Pack Consolidation Unit  
Waste from Consolidation Booth Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage or Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU> 5,000, any semi-solid or solid organic bearing material with BTU value> 5,000

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.

2. The Permittee shall not store hazardous waste with a specific gravity greater than 1.4 in Tank R96 and Tank R97.
3. The Permittee is authorized to install Tank R96 and R97 in Tank Farm D and shall comply with Section V, Special Condition 26.

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.



UNIT NAME:

Unit #12 - Tank Farm E

LOCATION:

Tank Farm E is located south of the Drum Liquefaction Unit (Figures #3, #5 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in five (5) tanks  
Tank Storage in five (5) tanks

ACTIVITY DESCRIPTION:

See Unit #8 for the description.

PHYSICAL DESCRIPTION:

Planned Modifications: With the issuance of the permit, Tank Farm E will be constructed. The rectangular shaped secondary containment will be about 28.7 feet wide by 68.7 feet long. The concrete block wall will be 8 inches thick and 36 inches high. The available secondary containment for tank storage will be 28,486 gallons. The available secondary containment will be greater than the volume of the largest tank plus the required rainfall amount. All the tanks will be on legs so there will be no need for an allowance for the displacement of tank footprints. The tank farm shall be coated to improve impermeability.

Tank N and Tank O are cylindrical tanks and will have elliptical tops and hemispherical bottoms. Tank R90 (Tank 90), Tank A-6 and Tank A-7 are cylindrical tanks and will have elliptical tops and bottoms. All five tanks will be installed vertically on legs. The tanks will be plumbed with valves and pipes which permit filling and offloading from the bottom of the tanks. These tanks will be equipped with agitators to assist in the fuel blending process and to ensure solids remain in suspension. They will include external sight gauges that indicate the liquid level in each tank and pressure indicators. Physical descriptions for the tanks are tabulated in Table IV-9 below.

Table IV-9

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank N (planned)	9,290	10 feet 6 inches	22 feet	TBD	Hemispherical bottom on legs	Carbon Steel
Tank O (planned)	9,290	10 feet 6 inches	22 feet	TBD	Hemispherical bottom on legs	Carbon Steel

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank R90 (planned)	4,794	8 feet 6 inches	17 feet	TBD	Elliptical bottom on legs	Carbon Steel
Tank A-6 (planned)	4,794	8 feet 6 inches	17 feet	TBD	Elliptical bottom on legs	Carbon Steel
Tank A-7 (planned)	4,794	8 feet 6 inches	17 feet	TBD	Elliptical bottom on legs	Carbon Steel
TOTAL	32,962					

TBD = to be determined upon certification of the new tank

(1) Height as proposed (not including the height of any dome or cone top).

Table IV-10

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm E Fuel Blending: high and low solids (planned)	10.0	Tank N (planned)	Agitator
	10.0	Tank O (planned)	Agitator
	10.0	Tank R90 (planned)	Agitator
	10.0	Tank A-6 (planned)	Agitator
	10.0	Tank A-7 (planned)	Agitator
TOTAL	50 gal./min.		

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 32,962 gallons.

The maximum capacity of total tank treatment is 50 gallons per minute.

For individual tanks, see Table IV-9 and Table IV-10.

#### WASTE SOURCES:

Waste from Liquefaction Unit  
Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Lab Pack Consolidation Unit  
Waste from Consolidation Booth Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage or Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU> 5,000, any semi-solid or solid organic bearing material with BTU value> 5,000

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.

2. The Permittee shall not store hazardous waste with a specific gravity greater than 1.9 in Tank N, Tank O, Tank R90, Tank A-6, and Tank A-7.
3. The Permittee is authorized to install Tank N, Tank O, Tank R90, Tank A-6, and Tank A-7 after the construction of Tank Farm E and shall comply with Section V, Special Condition 26.

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.

UNIT NAME:

Unit #13 - Tank Farm G

LOCATION:

Tank Farm G is located west of the Production Area between Tank Farm H and Tank Farm I (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in five (5) tanks  
Tank Storage in eight (8) tanks

Tank R37 and Tank R49 will also be authorized as treatment tanks to be used as components of the Fractionation Unit (see Unit # 23 for treatment activity information).

ACTIVITY DESCRIPTION:

See Unit #10 for the description.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm G has a rectangular shaped secondary containment that is about 39.5 feet by 19.5 feet. The concrete block wall is 8 inches thick and 17 inches high. The current available secondary containment for tank storage is 8,153 gallons which is not sufficient.

Tanks: Tanks are plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. The tanks are all vertically oriented cylindrical tanks fabricated from mild steel plates. Physical description for the subject tanks are tabulated below in Table IV-11.

Planned Modifications: With the issuance of the permit, the containment wall shall be raised an additional 20 inches. The modified containment wall will measure 37 inches high and will have available secondary containment of 17,729 gallons which is greater than the volume of the largest tank plus the required rainfall amount. The tanks are elevated and there is no displacement of tank footprints. The tank farm shall be coated to improve impermeability.

Table IV-11

Tank Number	Permit Capacity (Gallon)	Treatment	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 16 <sup>(1)</sup>	1962	FB	5 feet 3 inches	16 feet 7 inches	.054	Cone bottom on legs	Stainless Steel
Tank 17 <sup>(1)</sup>	1962	FB	5 feet 3 inches	16 feet 7 inches	.054	Cone bottom on legs	Stainless Steel
Tank 18 <sup>(1)</sup>	535	FB	4 feet	12 feet	.050	Cone bottom on legs	Stainless Steel
Tank 19 <sup>(1)</sup>	1962	FB	5 feet 3 inches	16 feet 7 inches	.054	Cone bottom on legs	Stainless Steel
Tank 20 <sup>(1)</sup>	1962	FB	5 feet 3 inches	16 feet 7 inches	.054	Cone bottom on legs	Stainless Steel
Tank 21 <sup>(1)</sup>	1895		4 feet 9 inches	16 feet 9 inches	.056	Dome bottom on legs	Carbon Steel
Tank R37	6100	FU	7 feet 6 inches	16 feet (length)	.170	Horizontal	Stainless Steel
Tank R49	15,792	FU	13 feet	22 feet	.150	Dish bottom skirted	Carbon Steel
TOTAL	32,170						

(1) Indicates that the tank is an existing tank but previously not permitted for hazardous waste storage or treatment.

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

FB = Fuel Blending

FU = Unit #23 Fractionation Unit

Table IV-12

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm G Fuel Blending low solids	10.0	Tank 16	None
	10.0	Tank 17	None
	10.0	Tank 18	None
	10.0	Tank 19	None
	10.0	Tank 20	None
TOTAL	50 gal./min.		

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 32,170 gallons.

The maximum capacity of total tank treatment is 50 gallons per minute.

For individual tanks, see Table IV-11 and Table IV-12 above.

### WASTE SOURCES:

Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage and Tank Storage Units  
Waste directly from transporter vehicles

### WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

### WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.

### HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22, except for Tank 21.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 3(b), 3(c), 3(d), 7(c), 7(d), 9(f), 9(i) and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.



UNIT NAME:

Unit #14 - Tank Farm H

LOCATION:

Tank Farm H is located north of Tank Farm G (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in six (6) tanks  
Tank Storage in six (6) tanks

ACTIVITY DESCRIPTION:

See Unit #10 for the description.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm H has a rectangular shaped secondary containment that is about 40 feet by 24.6 feet. The concrete block wall is 8 inches thick and 40 inches high. The available secondary containment for tank storage is 12,276 gallons. The available secondary containment is greater than the volume of the largest tank plus the required rainfall amount. All the tanks rest on the slab and there is allowance for the displacement of tank footprints. With the issuance of the permit, the tank farm shall be coated to improve impermeability.

Tanks: Tanks are plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. The tanks are all vertically oriented cylindrical tanks fabricated from mild steel plates. Physical descriptions for the subject tanks are tabulated in Table IV-13 below.

Table IV-13

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 26 <sup>(1)</sup>	8800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 27 <sup>(1)</sup>	8800	10 feet	15 feet	.087	Flat bottom	Stainless Steel
Tank 28 <sup>(1)</sup>	8800	10 feet	15 feet	.091	Flat bottom	Stainless Steel
Tank 29 <sup>(1)</sup>	8800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 30 <sup>(1)</sup>	8800	10 feet	15 feet	.089	Flat bottom	Stainless Steel
Tank 31 <sup>(1)</sup>	8800	10 feet	15 feet	.086	Flat bottom	Stainless Steel

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
TOTAL	52,800					

- (1) Indicates that the tank is existing but not previously permitted for hazardous waste storage or treatment  
(2) Height is defined as the total installed height (not including the height of any dome or cone top).

Table IV-14

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm H Fuel Blending low solids	10.0	Tank 26	none
	10.0	Tank 27	none
	10.0	Tank 28	none
	10.0	Tank 29	none
	10.0	Tank 30	none
	10.0	Tank 31	none
TOTAL	60 gal./min.		

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 52,800 gallons.  
The maximum capacity of total tank treatment is 60 gallons per minute.  
For individual tanks, see Table IV-13 and Table IV-14 above.

WASTE SOURCES:

Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage and Tank Storage Units  
Waste from offsite generators

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 5(b), 5(e), 9(i), and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.

UNIT NAME:

Unit #15 - Tank Farm I

LOCATION:

Tank Farm I is located west of the Production Area (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in seven (7) tanks  
Tank Storage in twelve (12) tanks

Fractionation Unit: Tank R35, Tank R36, Tank R42, Tank R43 and Tank R48 will also be authorized as treatment tanks to be used as components of the Fractionation Unit. See Unit # 23 for treatment activity information.

ACTIVITY DESCRIPTION:

See Unit #10 for the description.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm I has an irregularly shaped secondary containment that is about 94 feet long by 26 feet at it most narrow side and 39 feet at it most wide. The concrete block wall is 8 inches thick and 14 inches high. The available secondary containment for tank storage is 20,916 gallons. The available secondary containment is greater than the volume of the largest tank plus the required rainfall amount. Some of the tanks rest on the slab, some are on legs and some are horizontal on saddles. There is allowance for the displacement of tank footprints. With the issuance of the permit, the tank farm shall be coated to improve impermeability.

Tanks: Tanks are plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. The tanks are all vertically oriented cylindrical tanks fabricated from mild steel plates. Physical description for the subject tanks are tabulated in Table IV-15 below.

Table IV-15

Tank Number	Permit Capacity (gallons)	Treatment	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 83	11655	FB	10 feet	26 feet 2 inches	.128	Cone bottom skirted	Carbon Steel
Tank 84	11655	FB	10 feet	26 feet 2 inches	.128	Cone bottom skirted	Carbon Steel

Tank Number	Permit Capacity (gallons)	Treatment	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 85	11655	FB	10 feet	26 feet 2 inches	.128	Cone bottom skirted	Carbon Steel
Tank 101	11655	FB	10 feet	26 feet 2 inches	.127	Cone bottom skirted	Carbon Steel
Tank 102	11655	FB	10 feet	26 feet 2 inches	.126	Cone bottom skirted	Carbon Steel
Tank 103	11655	FB	10 feet	26 feet 2 inches	.127	Cone bottom skirted	Carbon Steel
Tank 104	11655	FB	10 feet	26 feet 2 inches	.127	Cone bottom skirted	Carbon Steel
Tank R35	4670	FU	8 feet 6 inches	14 feet	.063	Cone bottom on legs	Stainless Steel
Tank R36 <sup>(3)</sup>	7500	FU	10 feet 6 inches	8 feet <sup>(5)</sup> 8 inches (Length)	.250	Horizontal	Stainless Steel
Tank R42	9400	FU	10 feet 6 inches	23 feet 2 inches	.050	Elliptical bottom on legs	Stainless Steel
Tank R43 <sup>(1)</sup>	6996	FU	11 feet	19 feet 4 inches	.068	Elliptical bottom on legs	Stainless Steel
Tank R48 <sup>(4)</sup>	9300	FU	7 feet	31 feet (Length)	.200	Horizontal	Carbon Steel
TOTAL	119,451						

(1) Indicates that the tank is existing but not previously permitted for hazardous waste storage or treatment

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

(3) Installed tank height is 18 feet 6 inches.

(4) Installed tank height is 9 feet 6 inches.

(5) Length does not include length of domed ends.

FB = Fuel Blending

FU = Unit #23 Fractionation Unit

Table IV-16

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm I Fuel Blending low solids	10.0	Tank 83	none
	10.0	Tank 84	none
	10.0	Tank 85	none
	10.0	Tank 101	none
	10.0	Tank 102	none
	10.00	Tank 103	none
	10.0	Tank 104	none
TOTAL	70 gal./min.		

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 119,451 gallons.  
The maximum capacity of total tank treatment is 70 gallons per minute.  
For individual tanks, see Table IV-15 and Table IV-16 above.

WASTE SOURCES:

Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage and Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(d), 1(f), 1(j), 9(i), and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.



UNIT NAME:

Unit #16 - Tank Farm MNO

LOCATION:

Tank Farm MNO is located directly north of Tank Farm CLR (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in twelve (12) tanks  
Tank Storage in twelve (12) tanks

ACTIVITY DESCRIPTION:

See Unit #10 for the description.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm MNO has a rectangular shaped secondary containment that is about 24.6 feet wide by 86.4 feet long. The concrete block wall is 8 inches thick and 24 inches high. The available secondary containment for tank storage is 17,699 gallons. The available secondary containment is greater than the volume of the largest tank plus the required rainfall amount. All of the tanks rest on the slab. There is allowance for the displacement of tank footprints.

Tanks: Tanks are plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. Each tank is equipped with a sonic level indicator. The tanks are all vertically oriented cylindrical tanks fabricated from mild steel plates. Physical description for the subject tanks are tabulated in Table IV-17 below.

Planned Modification: With the issuance of the permit, the tank farm shall be coated to improve impermeability.

Table IV-17

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 32 <sup>(1)</sup>	8,800	10 feet	15 feet	.099	Flat bottom	Stainless Steel
Tank 33 <sup>(1)</sup>	8,800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 34 <sup>(1)</sup>	8,800	10 feet	15 feet	.089	Flat bottom	Stainless Steel
Tank 35 <sup>(1)</sup>	8,800	10 feet	15 feet	.086	Flat bottom	Stainless Steel

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 36 <sup>(1)</sup>	8,800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 37 <sup>(1)</sup>	8,800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 38 <sup>(1)</sup>	8,800	10 feet	15 feet	.097	Flat bottom	Stainless Steel
Tank 39 <sup>(1)</sup>	8,800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 40 <sup>(1)</sup>	8,800	10 feet	15 feet	.094	Flat bottom	Stainless Steel
Tank 41 <sup>(1)</sup>	8,800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
Tank 42 <sup>(1)</sup>	8,800	10 feet	15 feet	.085	Flat bottom	Stainless Steel
Tank 43 <sup>(1)</sup>	8,800	10 feet	15 feet	.086	Flat bottom	Stainless Steel
TOTAL	105,600					

(1) Indicates that the tank is existing but not previously permitted for hazardous waste storage or treatment

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

Table IV-18

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm MNO Fuel Blending: low solids	10.0	Tank 32	none
	10.0	Tank 33	none
	10.0	Tank 34	none
	10.0	Tank 35	none
	10.0	Tank 36	none
	10.0	Tank 37	none
	10.0	Tank 38	none
	10.0	Tank 39	none
	10.0	Tank 40	none
	10.0	Tank 41	none
	10.0	Tank 42	none
	10.0	Tank 43	none
TOTAL	120 gal./min.		

#### MAXIMUM PERMITTED CAPACITY:

The maximum total tank storage capacity is 105,600 gallons.

The maximum total tank treatment capacity is 120 gallons per minute.

For individual tanks, see Table IV-17 and Table IV-18 above.

WASTE SOURCES:

Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage and Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 5(c), 5(e), 9(i), and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.

UNIT NAME:

Unit #17 - Tank Farm Q

LOCATION:

Tank Farm Q is located west of the Production Area (Figures #3, #6 & #8).

ACTIVITY TYPE:

Tank Treatment: Fuel Blending for Energy Recovery in ten (10) tanks  
Tank Storage in fourteen (14) tanks

ACTIVITY DESCRIPTION:

See Unit #10 for the description.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm Q has an irregularly shaped secondary containment that is about 49 feet to 74 feet wide by 126 feet long. The concrete block wall is 8 inches thick and 32 inches high. The available secondary containment for tank storage is 153,164 gallons. The available secondary containment is greater than the volume of ten percent of the aggregate sum of all the tank capacities plus the required rainfall amount. All the tanks rest on the slab and there is allowance for the displacement of all the tank footprints.

Tanks: Tanks are plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. Tanks AES1, AES2, AES3 and AES4 shall be equipped with sonic level indicators. All tanks are vertically oriented cylindrical tanks fabricated from mild steel plates. Tanks are filled and emptied from the bottom. Physical descriptions for the tanks are tabulated in Table IV-19 below.

Planned Modifications: With the issuance of the permit, the Permittee is authorized to install Tank 81, Tank 86, Tank 87, Tank 88, Tank 89 and Tank 105 in Tank Farm Q. The tank farm shall be coated to improve impermeability.

Table IV-19

Tank Number	Permit Capacity (gallons)	Treatment	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
AES1 <sup>(1)</sup>	11,160		10 feet	19 feet	.105	Flat bottom	Stainless Steel
AES2 <sup>(1)</sup>	11,160		10 feet	19 feet	.105	Flat bottom	Stainless Steel
AES3 <sup>(1)</sup>	11,160		10 feet	19 feet	.105	Flat bottom	Stainless Steel
AES4 <sup>(1)</sup>	11,160		10 feet	19 feet	.105	Flat bottom	Stainless Steel
Tank 61 <sup>(1)</sup>	13,113	FB	12 feet	15 feet 6 inches	.095	Flat bottom	Stainless Steel
Tank 64 <sup>(1)</sup>	19,400	FB	12 feet	23 feet	.134	Flat bottom	Carbon Steel
Tank 65 <sup>(1)</sup>	19,400	FB	12 feet	23 feet	.134	Flat bottom	Carbon Steel
Tank 75 <sup>(1)</sup>	12,700	FB	9 feet 6 inches	24 feet	.122	Flat bottom	Stainless Steel
Tank 81 (planned)	3,000	FB	8 feet 6 inches	7 feet 6 inches <sup>(3)</sup>	TBD	Flat bottom	Stainless Steel
Tank 86 (planned)	1,500	FB	6 feet 6 inches	6 feet 3 inches <sup>(3)</sup>	TBD	Flat bottom	Stainless Steel
Tank 87 (planned)	200	FB	3 feet 6 inches	3 feet <sup>(3)</sup>	TBD	Flat bottom	Stainless Steel
Tank 88 (planned)	1,500	FB	6 feet 6 inches	6 feet 3 inches <sup>(3)</sup>	TBD	Flat bottom	Stainless Steel
Tank 89 (planned)	200	FB	3 feet 6 inches	3 feet <sup>(3)</sup>	TBD	Flat bottom	Stainless Steel
Tank 105 (planned)	12,000	FB	10 feet	26 feet 2 inches <sup>(3)</sup>	TBD	Cone bottom	Carbon Steel
TOTAL	127,653						

(1) Indicates that the tank is existing but not previously permitted for hazardous waste storage or treatment.

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

(3) Height as proposed (not including the height as any dome or cone top).

FB = Fuel Blending

TBD = to be determined upon certification of the new tank

Table IV-20

Unit Name	Treatment Capacity (gal./min.)	Major Components	Ancillary Equipment
Tank Farm Q: Fuel Blending low solids	10.0	Tank 61	none
	10.0	Tank 64	none
	10.0	Tank 65	none
	10.0	Tank 75	none
	10.0	Tank 81 (planned)	none
	10.0	Tank 86 (planned)	none
	10.0	Tank 87 (planned)	none
	10.0	Tank 88 (planned)	none
	10.0	Tank 89 (planned)	none
	10.0	Tank 105 (planned)	none
TOTAL	100 gal./min.		

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 127,653 gallons.  
The maximum capacity of total tank treatment is 100 gallons per minute.  
For individual tanks, see Table IV-19 and Table IV-20 above.

WASTE SOURCES:

Waste from Thin Film Evaporation Unit  
Waste from Fractionation Unit  
Waste from Vacuum Pot Distillation Unit  
Waste from High Temperature Unit  
Waste from Aerosol Depressurization Unit  
Waste from Container Storage and Tank Storage Units  
Waste directly from transporter vehicles

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane

Waste Stream Number	Waste Stream
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

#### WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.

#### HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

#### UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in Tank AES-1, AES-2, AES-3, AES-4, Tank 61, Tank 64, Tank 65 and Tank 75.
3. The Permittee shall not store hazardous waste with a specific gravity greater than 1.4 in Tank 81, Tank 86, Tank 87, Tank 88, Tank 89, and Tank 105.
4. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h), 1(j), 3(a), 3(d), 9(c), and 9(j).
5. The Permittee is authorized to install Tank 81, Tank 86, Tank 87, Tank 88, Tank 89 and Tank 105 in Tank Farm Q and shall comply with Section V, Special Condition 26.



AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.

UNIT NAME:

Unit #18 - Biological Treatment System Unit

LOCATION:

Biological Treatment System is located in Tank Farm K, south of the Production Area (Figures #3, #7 & #8).

ACTIVITY TYPE:

Tank Treatment: Biological treatment, clarification, filtration, and flocculation  
Treatment: Ultraviolet oxidation reduction, ion exchange, carbon adsorption

ACTIVITY DESCRIPTION:

The Biological Treatment System Unit is for the treatment of wastewater. The Biological Treatment System removes contaminants and particulates from the water by filtration, aerobic biological treatment, flocculation, clarification, sand filtering, ultraviolet oxidation (UV/OX), ion exchange, and carbon adsorption. Not all treatment methods may be needed for each batch of water processed.

Wastewater enters the system at Tank T-13. Wastewater in this tank is allowed to equalize for a controlled treatment rate and is sampled to determine the processing required. Once transferred to Tank B-2, wastewater is charged with nutrients for the biological process. The pH is also adjusted as necessary in Tank B-2. An optional filtration process uses a carbon adsorption unit and dual ion exchange beds. The aeration Tanks B-3 and B-3A increase the dissolved oxygen content of the wastewater. The aeration tanks drop solids from the process to Tanks B-7 and B-5. Solids are reprocessed back into the system as a nutrient source. Wastewater then flows into the biological reactors, Tanks B-4 and B-4A.

Sludge is settled out and skimmed off from two clarifiers (Tank B-6 and Tank B-6A.) To remove additional solids from the wastewater, it is processed through sand filters SF-1 and SF-2 prior to discharge into Tank B-8. The final step is the polishing treatment which consists of ultraviolet oxidation that does not rely on the use of chemicals. The ultraviolet light oxidation process destroys any remaining dissolved organic contaminants.

After the polishing step, treated water may be reused onsite or placed in sewer discharge tanks R-1A, R-1B, or R-1C which are not part of this Permit. The treated water is then discharged to the local Publicly Owned Treatment Works (POTW) if effluent meets the sewer discharge limits. The excess biomass or solids are either circulated back into the system or are discharged to the sewer.

## PHYSICAL DESCRIPTION:

Secondary Containment: The Biological Treatment System Unit is located in Tank Farm K which has a rectangular shaped secondary containment about 45.4 feet wide by 92.2 feet long. The concrete block wall is 8 inches thick and 34 inches high. The available secondary containment for tank storage is 44,165 gallons. The available secondary containment is greater than the volume of the largest tank plus the required rainfall amount. Some of the tanks rest on the slab, some are on legs and some are horizontal on saddles. There is allowance for the displacement of tank footprints. The tank farm shall be coated to improve impermeability.

Tanks: The Biological Treatment System consists of eleven tanks, two sand filters, an ultraviolet oxidation unit, a carbon adsorption filter, and an ion exchange bed. Physical descriptions for the tanks are tabulated in Table IV-21 below.

### Other Equipment:

1) The UV/OX system consists of two (2) reactors. The reactors are mounted vertically on two skids. The system includes hoses, valves, and ports that allow the UV system flow to operate either in parallel or series configuration.

2) The resin ion exchange bed is enclosed in two 320-gallon tanks and the activated carbon bed is enclosed in a 414-gallon tank. These treatment units are located adjacent to the existing waste water treatment system.

These two process units are installed vertically with their own secondary containment systems empty into the existing secondary containment of Tank Farm K.

Table IV-21

Tank Number	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank B-2	20 feet	11 feet 4 inches	.098	Flat bottom	Carbon Steel
Tank B-3	17 feet	16 feet	.117	Flat bottom/open top	Carbon Steel
Tank B-3A	17 feet	16 feet	.117	Flat bottom/open top	Carbon Steel
Tank B-4 <sup>(3)</sup>	24 feet (Length)	10 feet (Width)	.150	Flat bottom Rectangular/ open top	Carbon Steel
Tank B-4A <sup>(3)</sup>	24 feet (Length)	10 feet (Width)	.150	Flat bottom Rectangular/ open top	Carbon Steel
Tank B-5	10 feet	10 feet	.064	Flat bottom	Carbon Steel
Tank B-6	12 feet	11 feet	.069	Flat bottom/open top	Carbon Steel

Tank Number	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank B-6A	12 feet	11 feet	.069	Flat bottom/open top	Carbon Steel
Tank B-7	10 feet	10 feet	.064	Flat bottom	Carbon Steel
Tank B-8 <sup>(1)</sup>	5 feet (Length)	4 feet (Width)	.135	Open head, cone bottom square tank	Stainless Steel
Tank T-13	20 feet	11 feet 4 inches	.089	Flat bottom	Carbon Steel
Sand Filter #1 (SF-1)	3 feet	9 feet	.180	Flat bottom	Fiberglass re- enforced plastic (FRP)
Sand Filter (SF-2)	3 feet	9 feet	.180	Flat bottom	FRP

(1) Indicates that the tank is existing but not previously permitted for hazardous waste storage or treatment

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

(3) Tanks B-4 and B-4A are rectangular horizontal tanks.

Table IV-22

UNIT NAME	Treatment Capacity (gal./min.)	MAJOR COMPONENTS	Tank Capacity (gallons)	ANCILLARY EQUIPMENT
Biological Tank Treatment	30.0	T-13 Holding Tank	27,000	VOC System (carbon beds), overflow tank (2), tote tanks (4), cyclone separator
		B-2 Feed Tank	27,000	
		B-3 Aerator	27,200	
		B-3A Aerator	27,200	
		B-4 Bio Reactor	18,000	
		B-4A Reactor	18,000	
		B-5 Bio Sludge Holding Tank	5,900	
		B-6 Clarifier	9,242	
		B-6A Clarifier	9,242	
		B-7 Bio Sludge Holding Tank	5,900	
		B-8 Clean Effluent Discharge Holding Tank	375	
		Sand Filter 1	475	
		Sand Filter 2	475	
	50.0	UV Oxidation	Continuous	cleaning system
	10.0	Ion Exchange Bed (2 tanks)	320 gallons	
	10.0		320 gallons	
	10.0	Carbon Adsorption Filter	414 gallons	
TOTAL	36,000 gal/day			

**MAXIMUM PERMITTED CAPACITY:**

The maximum capacity of total treatment is 36,000 gallons per day.  
For individual tanks, see Table IV-22.

**WASTE SOURCES:**

Wastewater from Tank Farm A, B, CLR, D, E, G, H, I, MNO or Q  
Wastewater from Thin Film Evaporation Unit  
Wastewater from Fractionation Unit  
Wastewater from Vacuum Pot Distillation Unit  
Wastewater from High Temperature Unit  
Wastewater from Liquid-Liquid Extraction Unit  
Wastewater from Tank Farm J, Tank Farm F, or Tank Farm S (Inorganic Treatment)  
Wastewater from Truck Wash Unit  
Waste directly from transporter vehicles

**WASTE TYPES:**

Waste Stream Number	Waste Stream
6	Wastewater
	<p>Wastewater residuals from the above listed Waste Management Units resulting from the treatment of the following waste:</p> <ul style="list-style-type: none"> <li>▪ Waste Stream 1: Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene</li> <li>▪ Waste Stream 2: Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane</li> <li>▪ Waste Stream 3: Waste antifreeze, such as ethylene glycol, propylene glycol,</li> <li>▪ Waste Stream 7: Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions.</li> <li>▪ Waste Stream 8: Miscellaneous metal bearing waste</li> <li>▪ Waste Stream 9: Non-pumpable sludges, semi-solid waste, filter cake, contaminated soils</li> <li>▪ Waste Stream 16: Contaminated tanker trucks</li> </ul>

#### HAZARDOUS WASTE CODES:

The Permittee may accept only wastewater identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

#### UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.0 in Tank T-13, Tank B-2, Tank B-3, Tank B-3A, Tank B-6, Tank B-6A, and Tank B-8.
3. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in Sand Filter 1 (SF1), Sand Filter 2 (SF2), Tank B-4 and Tank B-4A.
4. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.2 in Tank B-5 and Tank B-7.
5. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 6(b), 6(c), 9(i), and 9(j).

#### AIR EMISSION STANDARDS:

The waste processed in this system is inorganic in nature and contains less than an average of 500 ppmw of organic volatiles. Therefore, the unit is not subject to air emission requirements in California Code of Regulations, title 22, chapter 14, article 28.5.

UNIT NAME:

Unit #19 - Neutralization Tank Unit – Tank Farm J

LOCATION:

Neutralization Tank Unit is located in Tank Farm J, west of Tank Farm I (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Treatment: Neutralization and precipitation

ACTIVITY DESCRIPTION:

Waste is received in 55-gallon drums, or totes, portable tanks, or bulk tanker trucks. Bulk waste is transferred to 500-gallon portable tanks for onsite storage. Corrosive waste material is pumped from drums or totes into Tank NT-1. The wastes may also be received as lab packs in smaller containers bulked in the Lab Pack Unit #29 into drums or other containers.

Acidic and alkaline waste streams are neutralized by the Permittee in a three-tank system, Tank NT-1, Tank NT-2 and Tank NT-3. The waste material is analyzed prior to treatment to ensure its characteristics are within the processing capabilities of the system. When sufficient waste is in the tank, a sample is taken of the material and a bench test is performed to determine the appropriate amount of treatment chemicals necessary to complete the neutralization reaction.

If acidic waste is treated, virgin or waste alkaline material is used to neutralize this waste. Similarly if alkaline waste is treated, virgin or waste acidic material is used to neutralize the waste. The pH adjusted waste material flows by gravity to Tank NT-2, where the pH is adjusted to a near neutral pH of 7. Ferrous sulfate is then added to Tank NT-2 as required to initiate precipitation of any suspended solids in the waste. After the ferrous sulfate is added, the waste is then pumped to Tank NT-3, where a predetermined amount of lime slurry is added if needed. The lime completes the precipitation of suspended solids and also adjusts pH of the final water product to within the allowable biological treatment system's processing range. The wastewater produced from the reaction is transferred to the biological treatment system. Sludges generated from solids precipitation are consolidated and sent off-site for final disposal.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm J has rectangular shaped secondary containment that is about 18.4 feet wide by 8.5 feet long. The concrete block wall is 8 inches thick and 15 inches high. The available secondary containment for tank storage is 1,459 gallons. The available secondary containment is greater than the volume of the largest tank plus the required rainfall amount. All the tanks are on legs so there is no allowance

for the displacement of tank footprints. The tank farm shall be coated to improve impermeability.

Tanks: Tanks NT-1, NT-2, and NT-3 are each 604 gallons in capacity and are all vertically oriented cylindrical tanks. Tanks are plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. Each tank is constructed of carbon steel and contains an epoxy coating designed to prevent corrosion. Physical descriptions for the tanks are tabulated in Table IV-23 and Table IV-24 below.

Table IV-23

Unit Name	Treatment Capacity gallons/minute	Major Components	Capacity in gallons	Ancillary Equipment
Neutralization Tank Unit – Tank Farm J	10.0	Tank NT-1	580	pH meter, pumps
		Tank NT-2	580	
		Tank NT-3	580	

Table IV-24

Tank Number	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank NT-1	3 feet 10 inches	10 feet 5 inches	.050	Dish bottom on legs	Carbon Steel with liner
Tank NT-2	3 feet 10 inches	9 feet 6 inches	.050	Dish bottom on legs	Carbon Steel with liner
Tank NT-3	3 feet 10 inches	8 feet 10 inches	.050	Dish bottom on legs	Carbon Steel with liner

(1) Three identical tanks, but with different overall height due to height of the legs; Height is defined as installed tank height.

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank treatment is 10 gallons per minute.  
For individual tanks, see Table IV-23 above.

#### WASTE SOURCES:

Waste from Lab Pack Unit  
Wastewater from offsite generators



WASTE TYPES:

Waste Stream Number	Waste Stream
6	Wastewater
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
8	Miscellaneous metal bearing waste

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
2. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(e), 1(h) and 1(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. Tanks NT-1, NT-2, and NT-3 are all vented to a caustic scrubber system located on the neutralization skid. Vapor is routed to a venturi nozzle on vessel S-2 to neutralize any acidic vapors.

UNIT NAME:

Unit #20 - Inorganic Treatment System - Tank Farm F

LOCATION:

The Inorganic Treatment System will be located in Tank Farm F, north of the Production Area (Figures #3, #5 & #8).

ACTIVITY TYPE:

Tank Treatment: neutralization, precipitation, oxidation/reduction, gravity separation  
Treatment: filter press, stabilization

The roll-off bin in Tank Farm F will also be authorized as container storage. See Unit #7 Bin Storage Area for the description of hazardous waste storage activities.

ACTIVITY DESCRIPTION:

Acid and alkaline waste will be received in 55-gallon drums, or totes, portable tanks and/or bulk tanker trucks. Containerized waste will be transferred to a compatible tanker truck for transfer into these tanks. Bulk waste or portable tanks will be transferred to this Unit or storage tanks (Unit #21 and Unit #22) prior to treatment.

Acid and alkaline waste will be analyzed for the appropriate waste analysis parameters. A bench scale test will be performed on these corrosive acid and alkaline wastes to determine the process for the precipitation of heavy metals and/or oxidation/reduction of hazardous waste. Acids will then be combined with alkalines in treatment tanks and neutralized. A chemical addition system will provide the necessary treatment chemicals. There is an acid fume scrubber system that neutralizes acidic gases that may evolve from this process.

When the neutralization treatment process is complete, the precipitate sludge will be separated from the wastewater by gravity separation. The treated waste will be allowed to settle in the treatment tanks or be transferred to a settling tank.

Filter Press: The precipitate sludge will be dewatered using the filter press. The filter press removes suspended solids from the wastewater using hydraulic pressure that forces water through permeable membranes on plates. The wastewater will be transferred to a second settling tank for further separation. The settling tanks used are Tanks A-2, A-3, A-4, A-5, Tank 79, and Tank 82. When the second settling tank becomes full, it will be checked for clarity and discharge parameters. The water then will be transferred to the Biological Treatment System for final treatment prior to discharge.

The dewatered sludge, known as filter cake, will be removed from the filter press and stored in a roll-off bin for stabilization or sent offsite. The filter cake from the filter press

can be sent directly to a landfill or to a metal reclamation facility or it may require stabilization prior to landfill.

Stabilization: Stabilization is the addition of pozzolanic material, such as cement kiln dust (CKD), or similar pozzolanic material, to the roll-off bin containing filter cake to solidify the waste for land disposal. This usually requires the use of a backhoe, auger, or similar type mixing equipment. The stabilized material will then be tested to ensure land disposal restriction requirements are met before transporting off site for final disposal. The storage and stabilization of Waste Stream 9 may also occur in this roll-off bin.

#### PHYSICAL DESCRIPTION:

Planned Modifications: With the issuance of the permit, Tank Farm F will be built within an existing maintenance building as a rectangular shaped secondary containment about 29 feet wide by 38 feet long. A concrete block wall 8 inches thick and 24 inches high will be installed. The available secondary containment for tank storage will be 16,487 gallons. The available secondary containment shall be greater than the volume of the largest tank. All the tanks will be on the slab so there will be an allowance for the displacement of tank footprints. The tank farm shall be coated to improve impermeability.

Tanks A-2, A-3, A-4 and A-5 will be equipped with mixers and cooling coils to remove heat. These tanks will also include pH meters and oxidation/reduction potential probes to monitor treatment. Tanks allow filling from the top and offloading from the bottom of the tanks. The tanks are all vertically oriented cylindrical tanks. The treatment chemical addition system will be specified at time of construction. Physical description for the subject tanks are tabulated in Table IV-25 and Table IV-26 below.

The filter press has an assembly of alternating solid plated and hollow frames. The wet sludge will be fed into one end and will be pressed between plates. The initial liquid filtrate will be returned to settling tanks. Water will be collected for further processing in the biological treatment unit. The resulting pressed solids or filter cake will be transferred into a roll-off bin.

Table IV-25

Unit Name	Treatment Capacity	Major Components	Capacity in gallons	Ancillary Equipment
Inorganic Treatment System Tank Farm F	20 gallons/minute	Tank A-2 (planned)	12,000	Mixer, level indicator, piping, pump
		Tank A-3 (planned)	12,000	pH sensor, control and alarm, mixer, indicators and/or controls (for pressure, temperature, and level), chemical injection, piping, pump, caustic scrubber system
		Tank A-4 (planned)	12,000	Mixer, level indicator, piping, pump
		Tank A-5 (planned)	12,000	pH sensor, control and alarm, mixer, indicators and/or controls (for pressure, temperature, and level), chemical injection, piping, pump, caustic scrubber system
Filter Press	20,000 lbs/day	Filter Press (planned)	100 cubic feet	Collection bins
Stabilization Unit	40,000 lbs/day	Roll-off Bin (planned)	20 cubic yards	Pozzolanic material storage, mixing device

Table IV-26

Tank Number	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank A-2 (planned)	10 feet	26 feet 2 inches	TBD	Cone bottom with skirt	Stainless Steel
Tank A-3 (planned)	10 feet	26 feet 2 inches	TBD	Cone bottom with skirt	Rubber lined Carbon Steel
Tank A-4 (planned)	10 feet	26 feet 2 inches	TBD	Cone bottom with skirt	Stainless Steel
Tank A-5 (planned)	10 feet	26 feet 2 inches	TBD	Cone bottom with skirt	Rubber lined Carbon Steel

TBD = to be determined upon certification of the new tank

(1) Height as proposed (including height of dome or cone top).

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank treatment is 20 gallons per minute.

The maximum capacity of total other treatment (filter press and stabilization) is 40,000 pounds per day.

For individual components, see Table IV-25 above.

#### WASTE TYPES FOR TANK TREATMENT

Waste Stream Number	Waste Stream
6	Wastewater
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
8	Miscellaneous metal bearing waste

#### WASTE TYPES FOR STABILIZATION (OTHER TREATMENT):

Waste Stream Number	Waste Stream
9	Non-pumpable sludges, filter cake, contaminated soils

#### HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

#### UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee is authorized to use only one 20-cubic yard bin for the stabilization of hazardous waste in this Unit.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.4 in Tank A-2, Tank A-3, Tank A-4 and Tank A-5.
3. The Permittee is authorized to install Tank A-2, Tank A-3, Tank A-4, Tank A-5, and the Filter Press after the construction of Tank Farm F and the Permittee shall comply with Section V, Special Condition 26.

#### AIR EMISSION STANDARDS:

The waste processed in this system will be inorganic in nature and contains less than an average of 500 ppmw of organic volatiles. Therefore, the unit is not subject to the air emission requirements in California Code of Regulations, title 22, chapter 14, article 28.5. Tanks A-2, A-3, A-4 and A-5 will be all vented to an acid fume scrubber system that will be located outside of the treatment area.

UNIT NAME:

Unit #21 - Tank Farm S

LOCATION:

Tank Farm S will be located directly north of Tank Farm MNO (Figures #3, #5 & #8).

ACTIVITY TYPE:

Tank Treatment in two (2) tanks: neutralization and gravity separation (settling of precipitates)

Tank Storage in two (2) tanks

ACTIVITY DESCRIPTION:

Neutralization of corrosive waste occurs in Tank 79 and Tank 82. Once waste is neutralized, most of the precipitates settle within seven (7) days. Tank 79 and Tank 82 also receive neutralized waste from Tanks A-2, A-3, A-4 and A-5 for settling (see Unit #20 for the description of this treatment). Tanks 78 and 80 are used for storage.

PHYSICAL DESCRIPTION:

Planned Modifications: With the issuance of the permit, Tank Farm S will be built, and it will have four tanks and a square shaped secondary containment about 31' wide by 31' long. A concrete block wall 8 inches thick and 36 inches high will be installed. The available secondary containment for tank storage will be 14,520 gallons. The available secondary containment shall be greater than the volume of the largest tank plus the required rainfall amount. All the tanks will be on the slab so there will be an allowance for the displacement of tank footprints. The tank farm shall be coated to improve impermeability.

Tanks will be plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. All four tanks will be vertically installed on skirts and will measure about 26 feet 2 inches high installed. All tanks will be equipped with level indicators that indicate the liquid level in each tank. The tanks are all cylindrical tanks fabricated from mild steel plates. Physical descriptions for the tanks are tabulated in Table IV-28 below.

Table IV-27

Unit Name	Treatment Capacity (gallons/minute)	Major Components	Capacity in gallons	Ancillary Equipment
Tank Farm S	20.0	Tank 79 (planned)	12,000	Mixer, level indicators, piping, pump
		Tank 82 (planned)	12,000	

Table IV-28

Tank Number	Permit Storage Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 78 (planned)	12,000	10 feet	26 feet 2 inches	TBD	Skirted cone bottom	Stainless Steel
Tank 79 (planned)	0	10 feet	26 feet 2 inches	TBD	Skirted cone bottom	Stainless Steel
Tank 80 (planned)	12,000	10 feet	26 feet 2 inches	TBD	Skirted cone bottom	Stainless Steel
Tank 82 (planned)	0	10 feet	26 feet 2 inches	TBD	Skirted cone bottom	Stainless Steel
TOTAL	24,000					

TBD = to be determined upon certification of the new tank.

(1) Height as proposed (not including the height of any dome or cone top).

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 24,000 gallons.

The maximum capacity of total tank treatment is 20 gallons per minute.

For individual tanks, see Table IV-27 and Table IV-28.

#### WASTE TYPES:

Waste Stream Number	Waste Stream
6	Wastewater
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
8	Miscellaneous metal bearing waste

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store acidic hazardous waste in Tank 78 and Tank 80.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.4 in any of the permitted tanks in this Unit.
3. The Permittee is authorized to install Tank 78, Tank 79, Tank 80, and Tank 82 after the construction of Tank Farm S is completed. The Permittee shall comply with Section V, Special Condition 26.

AIR EMISSION STANDARDS:

The waste processed in this system is inorganic in nature and contains less than an average of 500 ppmw of organic volatiles. Therefore, the unit is not subject to the air emission requirements in California Code of Regulations, title 22, chapter 14, article 28.5.



UNIT NAME:

Unit #22 - Tank Farm T

LOCATION:

Tank Farm T will be located between Tank Farm F and Tank Farm S (Figures #3, #5 & #8).

ACTIVITY TYPE:

Tank Storage

ACTIVITY DESCRIPTION:

This unit is for storage of hazardous waste only.

These tanks are principally designated for acidic waste management. They are also compatible with alkaline storage.

PHYSICAL DESCRIPTION:

Planned Modifications: With the issuance of the permit, Tank Farm T will be built as a rectangular shaped secondary containment about 31' wide by 38' long. A concrete block wall 8 inches thick and 18 inches high will be installed. The available secondary containment for tank storage will be 12,924 gallons. The available secondary containment shall be greater than the volume of the largest tank plus the required containment for 20 minutes of operation of sprinklers. All the tanks shall be on the slab so there will be an allowance for the displacement of tank footprints. The tank farm will be coated to improve impermeability.

Tank 106, Tank 107, Tank 108, and Tank 109 will be installed. These tanks will be cross-linked high-density polyethylene (HDPE) that will be plumbed with pipes and an inlet valve which permit filling from the bottom and offloading from the bottom of the tanks. All tanks shall be equipped with level instrumentations that indicate the liquid level in each tank, temperature gauge and a pressure gauge. The tanks will be all vertically oriented cylindrical tanks with cone heads and flat bottom with a slight slope. Physical descriptions for the tanks are tabulated in Table IV-29 below.

Table IV-29

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 106 (planned)	8,300	10feet	14 feet	NA	Flat bottom	HDPE Cross Linked

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank 107 (planned)	8,300	10feet	14 feet	NA	Flat bottom	HDPE Cross Linked
Tank 108 (planned)	8,300	10feet	14 feet	NA	Flat bottom	HDPE Cross Linked
Tank 109 (planned)	8,300	10feet	14 feet	NA	Flat bottom	HDPE Cross Linked
TOTAL	33,200					

(1) Height as proposed (not including the height of any dome or cone top).

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 33,200 gallons.  
For individual tanks and devices, see Table IV-29.

#### WASTE TYPES:

Waste Stream Number	Waste Stream
6	Wastewater
7	Corrosives: acids and alkaline materials that may contain RCRA heavy metals such as spent acids, cleaning compounds, caustic solutions
8	Miscellaneous metal bearing waste

#### HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

#### UNIT SPECIFIC SPECIAL CONDITIONS:

1. Although Tank 106, Tank 107, Tank 108 and Tank 109 are compatible for both acidic and alkaline wastes, the Permittee shall not commingle acidic and alkaline waste in the same secondary containment.
2. The Permittee shall properly clean out all tanks before any change in service may occur from acidic to alkaline hazardous waste storage or alkaline to acidic hazardous waste storage.
3. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.4 in any of the permitted tanks in this Unit.

4. The Permittee is authorized to install Tank 106, Tank 107, Tank 108, and Tank 109 after the construction of Tank Farm T is completed and the Permittee shall comply with Section V, Special Condition 26.

AIR EMISSION STANDARDS:

The waste processed in this system is inorganic in nature and contains less than an average of 500 ppmw of organic volatiles. Therefore, the unit is not subject to the air emission requirements in California Code of Regulations, title 22, chapter 14, article 28.5.

UNIT NAME:

Unit #23 - Fractionation Unit

LOCATION:

The Fractionation Unit is located in the Production Area, Tank Farm G and Tank Farm I (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Storage in three (3) tanks  
Treatment: Fractionation (distillation)

ACTIVITY DESCRIPTION:

Fractionation is a separation process that takes advantage of the differing volatility of different components in a mixture. When liquid mixtures are heated, some liquids change to a vapor state. The more volatile components of the mixture vaporize first. The vapor is then condensed to a liquid. Non- or less-volatile constituents remain in the liquid, and are managed as "still bottoms." By-products, such as "still bottoms" are typically fuel blended, incinerated, or sent to wastewater treatment.

The Permittee uses fractionation for solvent recycling, for ethylene glycol (antifreeze) recycling, and for wastewater treatment. Fractionation allows the separation of water and non-target solvents from target solvent waste streams, or the removal of contaminants, such as oil, grease, dirt, metals, and water from solvents, or the removal of organic chemical contamination from wastewater.

The process begins with the heating of a mixture of liquid chemicals in a reboiler vessel. The vapors are fed to a separate piece of equipment known as a column. As the vapors rise in the column, different components tend to condense at different levels throughout the column. The vapors that exit the top of the column are condensed back to the liquid state, and a portion is fed back, as liquid, to the top of the column ("reflux"). This liquid travels downward through the column. The liquid at the bottom of the column goes back into the reboiler. The non-volatile compounds or still bottoms accumulate in the reboilers. See Table IV-30 and IV-31 below for the individual components of the Fractionation Unit.

Liquid streams may be drawn off at various points of the column, depending on the feedstock and the desired product(s). The columns are currently equipped to produce product from the top of the column and the bottom. Condensed overhead product is piped to distillate receivers (tanks). Columns provide multi-stage separation, and can produce product of very high purity.

The caustic column will also be authorized as a component of the Liquid-Liquid Unit. The caustic reboiler will also be authorized as a component of the Liquid-Liquid Unit,

and as storage (See Unit #27 Liquid-Liquid Unit for the description of other hazardous waste treatment and storage activities).

#### PHYSICAL DESCRIPTION:

Secondary Containment: Production Area has an irregularly shaped secondary containment that is about 40 feet wide by 190 feet long. Containment is provided by the use of ramps and small curbs. The required secondary containment is 20,200 gallons. The available secondary containment for tank storage is 9,485 gallons and is not sufficient for the volume of the largest tank plus the required rainfall amount.

See Unit #13 Tank Farm G for the description of the secondary containment system for Tanks R37 and Tank R49.

See Unit #15 Tank Farm I for the description of the secondary containment system for Tank R35, Tank R36, Tank R42, and Tank R48.

Tanks: All tanks are plumbed with valves, pipes and a manifold which permit filling from the top and offloading from the bottom of the tanks. The tanks are equipped with external sight gauges that indicate the liquid level in each tank. The tanks are all vertically oriented cylindrical tanks fabricated from mild steel plates. Physical descriptions for the tanks are tabulated in Table IV-30 and Table IV-31 below.

Columns: The Fractionation Unit is a series of nine tall stainless steel towers called columns and their associated reboilers. Each of the columns is a vertical enclosed vessel with multiple horizontal trays that allow contact between the rising vapors and the falling liquid. Several different types of trays are used in the columns. The support equipment associated with the columns includes reboilers and condensers. Steam is used to provide the heat to the reboilers. Some of the reboilers are equipped with internal heating coils, while others rely on external heat exchangers. The processing equipment used for fractionation is shown in the Table IV-32 below.

Planned Modifications: With the issuance of the permit, the tank farm will be modified to meet secondary containment requirement. The concrete ramp will be raised three (3) inches and four (4) containment berms will be installed. This containment area shall then be coated to improve impermeability. Column #34 and Reboiler Tank R34 also will be installed.

Table IV-30

Name	Treatment Capacity gal./min.	Major Components	Capacity Gallons	Location	Ancillary Equipment
Column 24	14.0	24" Column (C24)	350	Production Area	Condenser, Reflux Pump, Overhead Separator, Plate and Frame Chilling Condenser, Piping
		R24 Reboiler	799	Production Area	

Name	Treatment Capacity gal./min.	Major Components	Capacity Gallons	Location	Ancillary Equipment
Column 32	18.5	32" Column (C32)	630	Production Area	Reboiler Heat Exchanger, Condenser, Reflux Pump, Overhead Separator, Plate and Frame Chilling Condenser, Piping
		R32 Reboiler	3647	Production Area	
Column 35	21.0	35" Column (C35)	790	Production Area	Reboiler Heat Exchanger, Condenser, Reflux Pump, Overhead Separator, Piping
		R35 Reboiler	4647	Tank Farm I	
Column 36	21.0	36" Column (C36)	790	Production Area	Reboiler Heat Exchanger, Condenser, Reflux Pump, Overhead Separator, Plate and Frame Condenser, Plate and Frame Chilling Condenser, Piping
		R36 Reboiler	7500	Tank Farm I	
Column 37	21.0	37" Column (C37)	790	Production Area	Condenser, Reflux Pump, Overhead Separator, Piping
		R37 Reboiler	6100	Tank Farm G	
Column 42	24.5	42" Column (C42)	1060	Production Area	Reboiler Heat Exchanger, Condenser, Reflux Pump, Overhead Separator, Plate and Frame Condenser, Plate and Frame Chilling Condenser, Piping
		R42 Reboiler	9400	Tank Farm I	
Column 43	24.5	43" Column (C43)	1060	Production Area	Reboiler Heat Exchanger, Condenser, Reflux Pumps (2), Overhead Separators (2), Plate and Frame Condenser, Piping
		R43 Reboiler	6996	Tank Farm I	
Column 48	28.0	48" Column (C48)	1400	Production Area	Condenser, Reflux Pump, Overhead Separator, Piping
		R48 Reboiler	9300	Tank Farm I	
Column 49	28.0	49" Column (C49)	1400	Production Area	Reboiler Heat Exchanger, Condenser, Reflux Pump, Overhead Separator, Piping
		R49 Reboiler	15,728	Tank Farm G	
Column 34 (planned)	21.0	34" Column (C34) (planned)	790	Production Area	Condenser, Reflux Pump, Overhead Separator, Piping
		R34 Reboiler (planned)	16,500		
TOTAL	221.5				

Table IV-31

Tank Number	Permit Storage Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Reboiler R24 (Reb-24)	830	4 feet	14 feet .5 inches	.050	Suspended dome bottom	Carbon Steel
Reboiler R32	3,647	7 feet	19 feet 3 inches	.071	Suspended cone bottom	Stainless Steel

Tank Number	Permit Storage Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
(Reb-32)						
Reboiler R34 (Reb-34) (planned)	16,500	13 feet	22 feet 2 inches <sup>(2)</sup>	TBD	Suspended dome bottom	Stainless Steel
TOTAL	20,977					

TBD = to be determined upon certification of the new tank.

(1) Height is defined as the total installed height (not including the height of any dome or cone top).

(2) Height as proposed (not including the height of any dome or cone top).

Table IV-32

Column	Diameter (inches)	Height without Skirt (feet)	Height (feet, inches)	Type of Trays
Column 24 (C24)	24	21.25	23 feet 1 inch	Valve
Column 32 (C32)	32	37.60	47 feet 7 inches	Sieve
Column 35 (C35)	38	34.58	47 feet 5 inches	Valve
Column 36 (C36)	36	74.67	83 feet 8 inches	Valve
Column 37 (C37)	37	42.83	54 feet 10 inches	Valve
Column 42 (C42)	42	51.50	71 feet 6 inches	Sieve
Column 43 (C43)	43	51.09	59 feet 9 inches	Sieve
Column 48 (C48)	46	51.67	61 feet 8 inches	Ballast
Column 49 (C49)	45	55.81	75 feet 10 inches	Sieve
Column 34 (C34) (planned)	34	50.00	75 feet	Sieve

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 20,977 gallons.  
The maximum capacity of total treatment is 221.5 gallons per minute.  
For individual tanks and columns, see Table IV-30 and Table IV-31.

WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
6	Wastewater

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not treat or store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in Tank R24 and Tank R32.
3. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.4 in Tank R34.
4. The Permittee is authorized to install Column C34 and Reboiler 34 (R34) in the Production Area and the Permittee shall comply with Section V, Special Condition 26.
5. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(d), 1(j), 4(a), 4(b), 4(c), 9(e), and 9(j).



AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 27, Air Emission Standards for Process Vents. Process vents from these units are vented to the plant VOC control system.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.
3. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #24 - Vacuum Pot Distillation Unit

LOCATION:

The Vacuum Pot Distillation Unit is located mainly in the Production Area and the two (2) receiving tanks are located in Tank Farm CLR (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Storage in four (4) tanks  
Treatment

ACTIVITY DESCRIPTION:

The Permittee uses vacuum pot (vac pot) distillation for the treatment of solvents and ethylene glycol (antifreeze). Vac pot distillation allows the separation of water and non-target solvents from target solvent waste streams, or the removal of contaminants, such as oil, grease, dirt, metals, and water from solvents and/or antifreeze waste streams. The vac pots are especially suited for the dehydration of waste antifreeze. The water is evaporated, leaving the antifreeze behind in the vac pot tank.

The Vacuum Pot Distillation Unit is used to manage material with high solids, oil, grease, and water contamination. This batch process consists of heating material in a tank that is placed under vacuum. The vacuum and temperature are set to evaporate the lower-boiling components(s) in the still pot to a separate overhead tank, where the distillate is condensed. The distillate is transferred to a distillate receiver for storage and/or further processing. Wastewater generated from the vac pot is processed in the Biological Treatment System or sent off-site for final disposal.

PHYSICAL DESCRIPTION:

Secondary Containment: See Unit #23 Fractionation Unit for the description of the secondary containment for the Production Area which contains Vac Pot 24 and Vac Pot 25 and see Unit #10 Tank Farm CLR for the description of the secondary containment system for Tank T-24 and Tank T-25.

Tanks: The vac pots located in the Production Area are piped to receiver Tank T-24, and Tank T-25 that are located in Tank Farm CLR. Each of the vac pots is a tank used to hold the waste and allow it to be heated. The vac pot tanks include nozzles for high and low level probes, temperature indicators, waste inlet, bottoms outlet, and vapor outlet. Both Vac Pot 24 and 25 have dish top heads and bottom cones and are installed on legs. The tanks installed vertically measure 12 feet 6 inches tall and 14 feet 4 inches, respectively.

The vac pot receiver Tank T-24 and Tank T-25 have dish tops, dish bottoms and are installed on skirts. The tanks are mounted vertically and measure 13 feet 6 inches as installed. These tanks are piped to their respective vac pots and are equipped with sight glass.

Table IV-33

Unit Name	Treatment Capacity (gal./min.)	Major Components	Capacity (gallons)	Location	Ancillary Equipment
Vacpot 24	5.0	Vacuum Pot 24 (V24)	1,525	Production Area	External heat exchanger, knockout separator, condenser, distillate receivers (2), pumps, and piping
		Tank T24	3,400	Tank Farm CLR	
Vacpot 25	5.0	Vacuum Pot 25 (V25)	2,234	Production Area	Internal heating coils, knockout separator, condenser, transfer pumps (2), distillate receivers (2) and piping
		Tank T25	3,400	Tank Farm CLR	
TOTAL	10.0				

Table IV-34

Tank Number	Permitted Storage Capacity (gallons)	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Vac Pot 24	1,525	5 feet 6 inches	12 feet 6 inches	.050	Cone bottom on legs	Carbon Steel
Tank T-24 <sup>(1)</sup>	3,400	7 feet 6 inches	13 feet 6 inches	.068	Dome bottom skirted	Carbon Steel
Vac Pot 25	2,234	5 feet 6 inches	14 feet 4 inches	.050	Cone bottom on legs	Carbon Steel
Tank T-25 <sup>(1)</sup>	3,400	7 feet 6 inches	13 feet 6 inches	.068	Dome bottom skirted	Carbon Steel
TOTAL	10,559					

(1) Indicates that the tank is existing but not previously permitted for hazardous waste storage or treatment.

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 10,559 gallons.  
The maximum capacity of total treatment is 10 gallons per minute.  
For individual tanks, see Table IV-33 and Table IV-34.

WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
6	Wastewater

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store or treat corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee may operate Tank T-24, Tank T-25, Vac Pot 24 and Vac Pot 25 under vacuum pressure.
4. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(b), 1(c), 1(j), 9(d), 9(e), 9(i), and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 27, Air Emission Standards for Process Vents. Process vents from these units are vented to the plant VOC control system.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.

UNIT NAME:

Unit #25 - High Temperature Unit

LOCATION:

The High Temperature Unit (HTU) is located in Tank Farm HTU which is directly east of Tank Farm A and Tank Farm B (Figures #3, #4 & #8).

ACTIVITY TYPE:

Treatment  
Tank Storage in three (3) tanks

ACTIVITY DESCRIPTION:

The Permittee uses the High Temperature Unit for processing higher boiling point, less volatile materials. The predominant waste stream managed in this unit is higher molecular weight glycols also known as antifreeze contaminated with water or oil. The High Temperature Unit is a vacuum pot distillation which allows the separation of contaminants, such as oil, grease, dirt, metals, and water from solvents and/or antifreeze waste streams.

High Temperature Unit process is a batch process that consists of heating material in Tank HTU using heat transfer liquid instead of steam which allows the unit to reach higher temperatures. The temperature is set to evaporate the lower-boiling components(s) in Tank HTU to a separate overhead tank, where the distillate is condensed. The distillate is transferred to distillate receiver tank HTU-1 or HTU-2 for storage and/or further processing. Wastewater generated from this Unit is processed in the Biological Treatment System or sent off-site for final disposal.

PHYSICAL DESCRIPTION:

Secondary Containment: Tank Farm HTU has a rectangular shaped secondary containment that is about 12 feet wide by 25 feet long. The required secondary containment is 1840 gallons. There is currently insufficient secondary containment for the volume of the largest tank plus the required rainfall amount. Tanks are all on legs, so there is no allowance made for tank displacement.

Tanks: The three principal components of the High Temperature Unit are Tank HTU and the two receiver tanks (HTU-1 and HTU-2). Tank HTU has an elliptical top and bottom and shall be equipped with a temperature gauge, two level controls, a pressure gauge, and drains from the bottom.

Both tanks HTU-1 and HTU-2 have elliptical tops and bottoms and are installed vertically on legs. These tanks are equipped with sight glass and level probes and drain

from the bottom. Physical descriptions for the subject tanks are tabulated in Table IV-35 and Table IV-36 below.

Planned Modifications: With the issuance of the permit, the tank farm will be modified to meet secondary containment requirement. The current three (3) inch berm will be raised nine (9) inches to a height of 12 inches. This containment area shall then be coated to improve impermeability.

Table IV-35

Unit Name	Treatment Capacity (gal./min.)	Major Components	Capacity in gallons	Ancillary Equipment
High Temperature Unit	5.0	HTU	1,127	Condenser, pumps and piping, boiler for heat source
		HTU-1 Receiver	474	
		HTU-2 Receiver	330	
TOTAL	5.0			

Table IV-36

Tank Number	Permit Storage Capacity (gallons)	Diameter (feet, inches)	Height <sup>(2)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank HTU <sup>(1)</sup>	1,127	5 feet	11 feet 10 inches	.05	Dome bottom on legs	Carbon Steel
Tank HTU-1 <sup>(1)</sup>	474	3 feet 6 inches	9 feet	.05	Dome bottom on legs	Carbon Steel
Tank HTU-2 <sup>(1)</sup>	330	3 feet 6 inches	9 feet	.05	Dome bottom on legs	Carbon Steel
TOTAL	1,931					

(1) Indicates that the tank is existing but not previously permitted for hazardous waste storage or treatment.

(2) Height is defined as the total installed height (not including the height of any dome or cone top).

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 1,931 gallons.  
The maximum capacity of total treatment is 5 gallons per minute.  
For individual tanks, see Table IV-35 and Table IV-36 above.

WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
6	Wastewater

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not treat or store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 2(a), 2(b) and 2(d).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 27, Air Emission Standards for Process Vents. Process vents from these units are vented to the plant VOC control system.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.

UNIT NAME:

Unit #26 - Thin Film Evaporation Unit

LOCATION:

Thin Film Evaporation Unit is located in the Production Area and the associated receiver tanks are located in Tank Farm A and Tank Farm B (Figures #3, #4 & #8).

ACTIVITY TYPE:

Treatment

ACTIVITY DESCRIPTION:

The Thin Film Evaporation Unit is primarily used to process high solid content waste solvent and high organic content wastewater. The thin film evaporator flashes the low boiling compounds overhead where they are condensed in a heat exchanger and pumped to a distillate receiver (tank). This allows for the separation of chemicals with large differences in boiling points. The thin film evaporator is able to manage materials with solids, oil, grease, and water. The process separates out the contaminants into compounds referred to as bottoms materials or non-volatiles. These compounds are pumped to fuels blending tanks where the material will be further blended to meet fuel specifications. Wastewater generated from the thin film evaporator is processed in the Biological Treatment System or sent off-site for final disposal.

The Permittee pumps waste into Tanks R93, R94, or R95 (located in Tank Farm B) for processing in the Thin Film Evaporator Unit. Waste is pumped from these agitated tanks directly into the Thin Film Evaporators currently TFE #1, TFE #2 and TFE #3. The waste is distributed onto the interior wall of the vessel. The Thin Film Evaporators are heated by plant steam passing in an external jacket. The rotating wipe assembly spreads the waste into a thin layer to improve the heat transfer. As lighter components evaporate, solid and heavier liquids continue to drop down the Thin Film Evaporators until they reach the bottom. At the bottom, they are drained and pumped back into the agitated tanks for further processing. If the viscosity is low or less than 1,000 centipoises, waste can be rerun in the Thin Film Evaporator Unit. If the viscosity is greater than 1,000 centipoises, waste is sent to the Fuel Blending Units.

The evaporated light ends are collected in receiving tanks Tank 4, Tank 8, and Tank 12 (located in Tank Farm A) which are hard piped into TFE #1, TFE #2, And TFE #3 respectively. The thin film evaporators use one of two chiller condensers. Only one Thin Film Evaporator device can use a chiller condenser at a time. Any non-condensable gases after the condenser are sent to the onsite VOC control system.



## PHYSICAL DESCRIPTION:

Secondary Containment: See Unit #23 Fractionation Unit, Unit #8 Tank Farm A, and Unit # 9 Tank Farm B for the description of the secondary containment system for the Production Area, Tank Farm A and Tank Farm B respectively.

Thin Film Evaporators: The three Thin Film Evaporators devices TFE#1 (or TF1), TFE #2 (or TF2), and TFE#3 (or TF3) are all similarly constructed. The vessels have carbon steel shells with stainless steel jackets. The vessels are cylindrical with a diameter of 28 inches and a length of 12.75 feet. They are installed vertically. The TFE#1, TFE #2, and TFE#3 are equipped with a motor to power the rotating internal blades. The outlet for still bottoms is located at the bottom.

Planned Modifications: After permit issuance, an additional Thin Film Evaporator device TFE #4 (or TF4) will be installed. TFE #4 will be similar to TFE #1 with a capacity of 150 gallons. TFE #4 will be used in conjunction with Tank R91 and R92 located in Tank Farm B.

Table IV-37

Unit Name	Treatment Capacity (gal./min.)	Major Components	Capacity in gallons	Location	Ancillary Equipment
TFE 1	8.0	R93 Reactor	4,743	Tank Farm B	Condenser
		TF 1 Thin Film	150	Production Area	
		Tank 4	4,500	Tank Farm A	
TFE 2	10.0	R94 Reactor	4,743	Tank Farm B	Condenser (3), Chilled condenser
		TF 2 Thin Film	190	Production Area	
		Tank 8	4,500	Tank Farm A	
TFE 3	10.0	R95 Reactor	4,743	Tank Farm B	Condenser (3), Chilled condenser
		TF 3 Thin Film	190	Production Area	
		Tank 12	4,500	Tank Farm A	
TFE 4 (planned)	15.5	R91 Reactor	4,743	Tank Farm B	Condenser (3)
		R92 Reactor	4,743	Tank Farm B	
		TF 4 Thin Film (planned)	150	Production Area	
		Tank 1	4,200	Tank Farm A	
TOTAL	43.5				

## MAXIMUM PERMITTED CAPACITY:

The maximum treatment capacity is 43.5 gallons per minute.  
For individual device capacities, see Table IV-37 above.

WASTE TYPES:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
6	Wastewater

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not treat corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee is authorized to install Thin Film Evaporator device TFE #4 (or TF4) in the Production Area. The Permittee shall comply with Section V, Special Condition 26.
4. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 7(a), 7(d), 9(i), and 9(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 27, Air Emission Standards for Process Vents. Process vents from these units are vented to the plant VOC control system.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.

3. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #27 - Liquid-Liquid Extraction Unit

LOCATION:

The Liquid-Liquid Extraction Unit is located in the Production Area Unit. (Figures #3, #4 & #8).

ACTIVITY TYPE:

Tank Storage in three (3) tanks

Tank Treatment: Fuel Blending for Energy Recovery, and Liquid-Liquid Extraction

ACTIVITY DESCRIPTION:

Some compounds are difficult to extract out of solvents. A specific example of this is alcohol that cannot be distilled out of chlorinated solvents. Rather than attempting to separate these compounds in the vapor phase, the solubility of alcohol in water is utilized in a liquid-liquid extraction process referred to as water washing.

Liquid-Liquid extraction is used as a product finishing process to extract out water-soluble organic compounds of similar boiling points or with strong affinity to the product solvent. Liquid-Liquid extraction can occur in the Water-Wash Tank (WWT), the Stainless Steel Kettle, or the Caustic Column. Water is mixed with the solvent to dissolve the contaminant in the water. After mixing is complete, the resulting liquids are allowed to phase-separate due to different specific gravity. The water phase will then contain the contaminant. This water phase is removed leaving the product solvent free of the contaminant.

PHYSICAL DESCRIPTION:

Secondary Containment: See Unit #23 Fractionation Unit, for the description of the secondary containment system for the Production Area.

Tanks: The Water Wash Tank (WWT) is a cylindrical tank with an elliptical top and a cone bottom mounted vertically on a skirt. The tank is filled and emptied from the bottom. The Stainless Steel Kettle (SSK) is cylindrical tank with a dome top and bottom. The tank is installed vertically on legs to a height of 12 feet 4 inches tall. The Caustic Column (CC) is installed vertically on a skirt and measures 57.67 feet tall.

The Caustic Reboiler (RCC) is fabricated of monel which is an alloy containing nickel, copper, iron and other trace elements with nickel being the primary component (at least 63-70%). Monel is susceptible to corrosion. The tank has a dish top and bottom and installed vertically on legs stands 11 feet 4 inches high.

Table IV-38

Tank Number	Permit Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Caustic Reboiler (RCC)	2,160	6 feet 6 inches	11 feet 4 inches	.050	Dome bottom on legs	Monel
Stainless Steel Kettle (SSK)	1,618	6 feet	12 feet 4 inches	.050	Dome bottom on legs	Stainless Steel
Water Wash Tank (WWT)	3,305	9 feet	15 feet 11 inches	.090	Cone bottom skirted	Carbon Steel
TOTAL	7,083					

(1) Height is defined as the total installed height (not including the height of any dome or cone top).

Table IV-39

Unit Name	Permit Treatment Capacity	Permit Tank Treatment Capacity	Major Components	Capacity (gallons)	Ancillary Equipment
Water Wash Tank (WWT)	3,305 gal/day	10 gal./min.	WWT (T-WW)	3305	
Stainless Steel Kettle (SSK)	1,618 gal/day	10 gal./min.	SSK	1618	
Caustic Column (CC)	20 gal/min	n.a.	Caustic Column (CC or Caustic Drying Tower)	1035	Reboiler heat exchanger, condenser, reflux pump, overhead separator, piping
		10 gal./min.	Caustic Reboiler (RCC)	2160	
TOTAL	500 gallons/hour	30 gal./min.			

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total tank storage is 7,083 gallons.

The maximum capacity of total treatment is 500 gallons per hour for either fuel blending or liquid- liquid extraction.

For individual tanks and devices, see Table IV-38 and Table IV-39 above.

WASTE TYPES FOR STORAGE:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
6	Wastewater
8	Miscellaneous metal bearing waste

WASTE TYPES FOR FUEL BLENDING:

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU> 5,000, any semi-solid or solid organic bearing material with BTU value> 5,000

## WASTE TYPES FOR LIQUID-LIQUID EXTRACTION

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
3	Waste antifreeze, such as ethylene glycol, propylene glycol, triethylene glycol
6	Wastewater

## HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

## UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not treat or store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22 in the Wash Water Tank or in the Stainless Steel Tank.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.1 in any of the permitted tanks in this Unit.
3. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 4(a), 4(b), 4(c), 9(e), 9(j).

## AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 27, Air Emission Standards for Process Vents. Process vents from these units are vented to the plant VOC control system.
2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks.

UNIT NAME:

Unit #28 - Liquefaction Unit

LOCATION:

The Liquefaction Unit is located in the Drum and Debris Processing Building east of the Sampling Building (Figures #3, #5 & #8).

ACTIVITY TYPE:

Treatment: Liquefaction, Shredding, Consolidation, Fuel Blending.  
Tank Storage in one (1) tank.

ACTIVITY DESCRIPTION:

Many drums shipped to the Facility contain significant amounts of sludge, which may settle to the bottom of drums. Drums that contain sludge are initially pumped to remove any free liquids that can be removed. Once the free liquids are removed, the drum is moved to the liquefaction area for further waste removal and processing. For open-top drums, the lid is simply removed. Bung-top or closed-head drums require that the head be cut off from the drum. Once the head is removed, the sludge is mechanically removed from the drum using an auger and/or a hydraulic scraping blade. In some instances it is necessary to remove both ends of the drum, or add solvent in order to remove sludge.

The scraped sludges drop into particle sizing equipment that shreds any solids found in the sludge until they can pass through a screen. At this point, solvent with a high British Thermal Unit (BTU) value is added to the system. The solvent enhances the shredding operation and dissolves much of the solids. The sludges are further sized in static mixers and are circulated in Tank PT-1. Materials that will not dissolve or be suspended are removed from the system and are blended for shipment to an incinerator or packaged as a solid fuel to be burned in a cement kiln.

An emulsifying agent may be added to the circulation tank to help maintain the solids in suspension. After thorough mixing, the liquid waste in circulation Tank PT-1 is moved to the fuel blending Unit #8 - Tank Farm A, Unit #9 – Tank Farm B, or Unit #11 - Tank Farm D by use of tanker truck.

PHYSICAL DESCRIPTION:

Secondary Containment: The Drum and Debris Building has a rectangular shaped secondary containment that is about 37 feet wide by 54 feet long. The concrete block wall is 8 inches thick and 6 inches high. The available secondary containment for tank storage is 7,500 gallons. The available secondary containment is greater than the volume of the largest tank. Tank PT-1 and the Liquefaction equipment are on legs. So



there is no need for an allowance for the displacement of tank footprint for secondary containment volume.

Liquefaction Unit: The Liquefaction Unit occupies two levels in the Drum and Debris Building. Two sub-chambers make up the main chamber of the unit which is located on the second floor. The main chamber measures about 70 inches by 90 inches and can hold up to 1000 gallons. Opened drums are fed via a feed belt into either of the two sub-chambers. One of the sub-chambers includes a motorized auger that mechanically scraps out sludge and the second sub-chamber includes a motorized brush. The sludge drops down to the bottom of the main chamber where a hydraulic ram presses the sludge and any solids into a shredder. A sump located under the shredder catches the liquefied sludge. If necessary the sludge is passed through second and third stage grinder to ensure that it can be pumped through the filter screens and into Tank PT-1. The start of the conveyor, the raw material feed belt, used to move drums to the main chamber is located in the Sampling Area.

Tank: Tank PT-1 is a cylindrical tank and is equipped with a Cowel's mixer and a sight glass to indicate the liquid level in the tank. The tank has a dome top and a dome bottom and is installed vertically on legs.

Planned Modifications: With the issuance of the permit, the tank farm shall be coated to improve impermeability. Once Unit #12 – Tank Farm E is constructed, transfer of waste to this fuel blending unit will be conducted by piping or the use of a tanker truck.

Table IV-40

UNIT NAME	Treatment Capacity	MAJOR COMPONENTS	Capacity (gallons)	ANCILLARY EQUIPMENT
Liquefaction	22,000 gallons per day	Liquefaction Enclosure and first stage Shredder	800	VOC system, raw material feed belt, Cyclone Separator, fire suppressant system, drum de-header, tanker for diesel
		Second and third stage grinders		
		Tank PT-1	1,160	

Table IV-41

Tank Number	Permit Storage Capacity (gallons)	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank PT-1	1160 gallons	4 feet 6 inches	13 feet 10 inches	.050	Dome bottom on legs	Carbon Steel

(1) Height is defined as the total installed height (not including the height of any dome or cone top).

**MAXIMUM PERMITTED CAPACITY:**

The maximum capacity for total treatment is 400 drums or 22,000 gallons per day.  
The maximum capacity for total storage tank is 1,160 gallons.  
For individual tanks and devices, see Table IV-40 and Table IV-41 above.

**WASTE TYPE:**

Waste Stream Number	Waste Stream
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane
4	Wastes with high British Thermal Unit (BTU) value such as paint, thinner, hydrocarbon solvents, machine oils, alcohols, gasoline, diesel, and inks.
5	Semi-solid and solid materials with high BTU value such as paint sludge, waxes, greases, photoresist, spill cleanup residuals, residues where the absorbent used had BTU > 5,000, any semi-solid or solid organic bearing material with BTU value > 5,000

**HAZARDOUS WASTE CODES:**

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Conditions.

**UNIT SPECIFIC SPECIAL CONDITIONS:**

1. The Permittee shall not treat or store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h), 1(j), 2(c), and 2(d).

**AIR EMISSION STANDARDS:**

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28, Air Emission Standards for Equipment Leaks. The agitated tanks must meet Level 2 controls. The vapor spaces of these closed tanks are vented to the plant vapor emission control system, which includes a scrubber system, followed by venting of any remaining vapor emissions to the on-site boiler.

2. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit # 29 - Lab Pack Consolidation Unit

LOCATION:

The Lab Pack Consolidation Unit is located in West Storage Building #2 in the northwest corner of the Field Services Warehouse (Figures #3, #6 & #8).

ACTIVITY TYPE:

Container Transfer (bulking of lab packs)

ACTIVITY DESCRIPTION:

A lab pack is an overpack containment of two or more small containers (usually less than 5 pounds or one-half gallon size) packaged within a larger outer container. Typically, the inner containers are surrounded by absorbent materials. If present, the absorbents can be homogeneous solids or debris materials. These containers received by the Facility can vary in size and type and may require bulking prior to on-site treatment or off-site shipment for final disposal.

The Permittee will unpack lab pack drums and bulk compatible materials by pouring compatible waste from small containers into a single larger container. The hazardous waste can then be further processed onsite or sent offsite for proper handling. Before bulking, compatibility tests shall be performed on all waste materials not known to be compatible. Waste shall be consolidated into USDOT- approved drums or other containers.

See Unit #5 for information on the repackaging of lab packs in West Storage Building #2 and Unit # 1 for repackaging in North Storage Building.

PHYSICAL DESCRIPTION:

Secondary Containment: The Lab Pack Consolidation Area has a sump in the southwest corner. See Unit # 5 West Storage Building # 2 for further description of the secondary containment.

Lab Pack Consolidation: West Storage Building #2 has a specific area designated for the handling of Lab Packs in the Field Services Warehouse. There is no ancillary equipment or major components for this unit. This area is enclosed behind clear vinyl curtains and is vented to a water scrubber located just outside and west of West Storage Building #2.

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total treatment is 10,000 pounds per day.

WASTE TYPES:

Waste Stream Number	Waste Stream
17	Lab Packs

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for the above waste stream, unless specifically excluded in the Unit Specific Special Condition.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not treat or store reactive waste that meets the definition of California Code of Regulations, title 22, section 66261.23.
2. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h) and 1(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers. For more information, see the Approved Part "B" Application, Section O, Air Emission Standards for Tanks and Containers.

UNIT NAME:

Unit #30 - Consolidation Booth Unit

LOCATION:

The booth will be located outside adjacent to the North Storage Building (Figures #3, #5 & #8).

ACTIVITY TYPE:

Container Transfer (container sorting, and repackaging)

ACTIVITY DESCRIPTION:

The consolidation booth will be used to sort and repackage containers of solid hazardous waste. Hazardous waste container with solid debris and incidental amounts of liquids can be sorted out and consolidated with similar waste into other containers. Waste with similar hazard characteristics may be repackaged into larger container suitable for off-site transfer. After consolidations, drums may be sent to Unit #1 (North Storage Building) and Unit #5 (West Storage Building #2) for further repackaging. Some drums may be sent to Unit #1 (North Storage Building) and Unit #2 (South Storage Building) for storage.

PHYSICAL DESCRIPTION:

Secondary Containment: This unit will handle solids that may include incidental amounts of liquids. A drum will be used under the consolidation table to contain any free liquids. The booth itself will include small berm with a minimum height of three (3) inches.

Consolidation Booth: This booth will be a free standing structure measuring about 26 feet by 10 feet and 8.5 feet in height. The booth will be constructed of aluminum studs with noncombustible polystyrene core. The walls will be laminated aluminum on both sides. Entrances will include a roll-up door on one wall and two doors on the opposite wall. The booth will be equipped with a sorting table 8 feet long and 4 feet wide, 2 collection hoppers, an exhaust fan, a back-draft hood, fire sprinkler heads, and an air pollution control device.

Table IV-42

UNIT NAME	TREATMENT CAPACITY	MAJOR COMPONENTS	LOCATION	ANCILLARY EQUIPMENT
Consolidation Booth Unit (planned)	50,000 pounds per day	Consolidation Booth	North of North Storage Building	Air pollution Control Device, end dump trailers and bins for waste repackaging, self-dumping hoppers
		Sorting Table	Within the booth enclosure	

**MAXIMUM PERMITTED CAPACITY:**

The maximum capacity for total treatment is 50,000 pounds per day.

**WASTE TYPES:**

Waste Stream Number	Waste Stream
10	Solid fuel such as contaminated rags, wipes, wood and other debris having high BTU value, reacted resins, spill cleanup residuals
11	Solids for consolidation and landfill such as solid corrosive materials, sodium bicarbonate, absorbent with hydrocarbons, plating sludges, baghouse dust, petroleum contaminated soils
13	Solids such as contaminated rags, wipes, wood plastic containers, and other debris having medium BTU value

**HAZARDOUS WASTE CODES:**

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Condition.

**UNIT SPECIFIC SPECIAL CONDITIONS :**

1. The Permittee is authorized to construct the Consolidation Booth and the Permittee shall comply with Section V, Special Condition 26.

**AIR EMISSION STANDARDS:**

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #31 - Debris Shredder

LOCATION:

The Debris Shredder is located in the Drum and Debris Processing Building east of the Sampling Area (Figures #3, #5 & #8).

ACTIVITY TYPE:

Treatment - Shredding

ACTIVITY DESCRIPTION:

The Debris Shredder physically reduces particle size to facilitate consolidation, handling, and transportation of waste. Solid waste materials are passed through the shredder system where they are reduced in size and collected. After processing, these waste solids may then be consolidated with other waste and sent off-site for disposal, treatment, or for use as solid hazardous fuel.

The automated shredding system consists of bins, a bin dumper, three shredders in series, a transfer screw auger, and a conveyor system for incoming and outgoing bins. Materials to be shredded are placed in the bin dumper. The bin dumper is transported on a roller conveyor that connects to an elevator. The elevator locks on to the bin, then hoists and dumps the bin into the primary shredder. The primary shredder reduces the materials down to a size of 1½ inch or less. A ram intermittently cycles to force any solids through that can not be grabbed by the shredder teeth. The material is then gravity fed into an auger that elevates and feeds the material into the secondary shredder. The material is reduced to ¾ inch or less and falls directly into the tertiary shredder that reduces the material to a final particle size of ½ inch. The final product falls directly into an empty hopper placed under the tertiary shredder. Once the shredding is complete, the system interlocks require that an empty hopper replace the full outgoing one. Shredded material is then consolidated in bulk or drums and is sent off-site for final disposal or treatment.

PHYSICAL DESCRIPTION:

Secondary Containment: This unit may handle solids that may include incidental amounts of liquids. See Unit #28 for a description of the secondary containment for the Drum and Debris Building.

Debris Shredder: The Debris Shredder System includes a three stage shredder from SSI Shredding Systems and utilizes two 75-hp motors and one 50-hp motor. The complete assembly includes the inlet hopper/feed system, screw conveyors and a discharge chute. Both the inlet side of the grinder and the discharge side include



overpressure vents that are designed to function like relief valves and open in an overpressure situation.

The dumping bin is 36 inches x 36 inches x 40 inches in capacity and elevates to a height of 15 feet 4½ inches where it is dumped into the primary shredder. The secondary shredder has an opening of 30 inches x 20 inches with a cutter thickness of ¾ inch. The tertiary shredder opening is 30 inches x 20 inches with a cutter thickness of ½ inch. All cutting teeth are made of high-yield stainless steel. The system is nitrogen inerted (<10% O<sub>2</sub>) to eliminate the potential of fire during processing. In the event of a fire, the system is equipped with a CO<sub>2</sub> suppression system with dual-point manual controls. The shredding chambers are equipped with video cameras to view the shredding activity. Airlock doors ensure the shredding chamber maintains a low oxygen concentration in the primary shredder. An explosion-proof door on the primary shredder is designed to protect operating equipment and personnel.

Table IV-43

UNIT NAME	TREATMENT CAPACITY	MAJOR COMPONENTS	ANCILLARY EQUIPMENT
Debris Shredder <sup>(1)</sup>	60,000 pounds per day	three shredders in series,	bins, a bin dumper, a transfer screw auger, and a conveyor system for bins

(1) Indicates that the unit is existing but not previously permitted for hazardous waste treatment

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity for total treatment is 60,000 pounds per day.

#### WASTE TYPES:

Waste Stream Number	Waste Stream
13	Solids such as contaminated rags, wipes, wood plastic containers, and other debris having medium BTU value

#### HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for the above waste stream, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not treat or store corrosive waste that meets the definition of California Code of Regulations, title 22, section 66261.22.
2. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h) and 1(j).

AIR EMISSION STANDARDS:

1. The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #32 - Portable Aerosol Depressurization Unit

LOCATION:

This portable unit can be used in the North Storage Building, South Storage Building, Sampling Area, West Storage Building#1, and West Storage Building #2 (Figures #3, #5, #6 & #8).

ACTIVITY TYPE:

Treatment: Aerosol Can Depressurization

ACTIVITY DESCRIPTION:

The Aerosol Depressurization Unit is used to process commercial aerosol containers to remove propellant and container contents. The system is fully enclosed in design to eliminate the potential of vapors escaping to the surroundings. Aerosol cans are placed in a negative pressure chamber where they are mechanically punctured. The negative pressure is maintained by a vacuum pump that is capable of consolidating vapors into pressurized storage vessel. Vapors in the vessels are condensed into liquids that can be recycled or blended as alternative fuels or the vapors are treated with carbon filter. After a can is punctured, the operator opens the chamber and removes the empty cans. The cans are consolidated for disposal or reclamation offsite as scrap metal. The collected liquids and used carbon filters are managed as hazardous waste and managed accordingly.

PHYSICAL DESCRIPTION:

Secondary Containment: See Unit #1 North Storage Building, Unit #2 South Storage Building, Unit #3 Sampling Area, Unit #4 West Storage Building #1, and Unit #5 West Storage Building #2 for a description of the secondary containment systems.

Aerosol Depressurization Unit: The system consists of four components: 1) the puncturing unit, 2) a liquid collection drum, 3) a coalescing filter and flexible hose, and 4) a carbon canister. The liquid collection drum is a standard 55-gallon closed-head drum.

Table IV-44

UNIT NAME	TREATMENT CAPACITY	MAJOR COMPONENTS	LOCATION	ANCILLARY EQUIPMENT
Aerosol Depressurization Unit (planned)	20 cans per minute	Portable Aerosol Depressurization Unit	North Storage Building, South Storage Building, Sampling Area, West Storage Building#1, and West Storage Building #2	Liquid collection vessel, vacuum pump, carbon canister

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total treatment is 20 cans per minute.

WASTE TYPES:

Waste Stream Number	Waste Stream
14	Aerosol cans

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for the above waste stream, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall upgrade the area in which the Unit is operated according to Section VII, Compliance Schedule items 1(h) and 1(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #33 - Drum Crushing Unit

LOCATION:

The Drum Crushing Unit consists of two drum crushers. The fixed drum crusher will be located in North Storage Building. The portable crusher can be used in the North Storage Building, South Storage Building, West Storage Building #1, and West Storage Building #2 (Figures #3, #5, #6 & #8).

ACTIVITY TYPE:

Treatment - Drum crushing.

ACTIVITY DESCRIPTION:

The Drum Crushers are designed to crush 55-gallon steel drums. A hydraulic piston compresses a 55-gallon drum from 35 inches to 2.5 inches in height. These crushed drums are then transferred to roll-off bins or other containers. These drums typically come from the liquefaction process, but can come from other areas in the Facility. Crushed drums are sent for offsite management as scrap metal or hazardous waste.

PHYSICAL DESCRIPTION:

Secondary Containment: See Unit #1 North Storage Building for the description of the secondary containment system for the fixed drum crush unit. In addition, containment trays are placed under the full length of the conveyor to contain any amount of residue that may drain from the drums.

See Unit #1 North Storage Building, Unit #2 South Storage Building, Unit #4 West Storage Building #1, and Unit #5 West Storage Building #2 for a description of the secondary containment systems for the portable drum crush unit.

Fixed Drum Crusher: The fixed unit consists of a 65-foot long chain driven roller that feeds drums from the end of the building to the crusher. The in-feed conveyor width is 27¾ inches and operates at a rate of 30 feet per minute. The in-feed conveyor rollers are fitted with ultra high molecular weight (UHMW) plastic sleeves to allow the line of drums to start and stop along the rollers with minimum amount of work. The drum turner receives the drums, turns them over, and places them onto the in-feed conveyor. The drum turner is automatic in operation. The drums continue down the conveyor until they reach the drum crusher. The drums are then automatically fed into the crusher. The crusher operates at high pressure and crushes a drum with 95,000 pounds of force. The hydraulic power unit has a 60-gallon reservoir and is driven by a 20-hp electric motor. The cage around the crusher features an automatic vertical sliding door.

After they are crushed, the drums are mechanically fed onto the outgoing conveyor that automatically transfers the crushed drums into a container. The receiving container is a roll-off bin and is located outside and north of the North Storage Building. The out-going conveyor adjusts upward between 15 and 30 degrees pitch. It has a width of 20 inches and operates at a rate of 65 feet per minute. The conveyor end is located outside the North Storage Building where it drops the crushed drums into bins.

Portable Drum Crusher: The portable unit has an integral hydraulic power unit. Drums are manually placed into this unit one at a time. The drum is crushed, and then manually placed into a container.

Table IV-45

UNIT NAME	TREATMENT CAPACITY	MAJOR COMPONENTS	LOCATION	ANCILLARY EQUIPMENT
Drum Crush Unit <sup>(1)</sup>	25 drums/hour	Fixed Drum Crusher	North Storage Building	Incoming conveyor belt, outgoing conveyor belt, hydraulic piston, cage
	20 drums/hour	Portable Drum Crusher	North Storage Building, South Storage Building, Sampling Area, West Storage Building#1, and West Storage Building #2	

(1) Indicates that the unit is existing but not previously permitted for hazardous waste treatment

#### MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total treatment is 25 drums per hour.

#### WASTE TYPES:

Waste Stream Number	Waste Stream
15	Contaminated containers

#### HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for the above waste stream, unless specifically excluded in the Unit Specific Special Condition. The drums to be crushed in this unit are supposed to be "empty" under RCRA and thus carry no RCRA codes.

UNIT SPECIFIC SPECIAL CONDITIONS :

1. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 1(h) and 1(j).
2. The Permittee shall not treat waste that contains more than 500 ppmw or more of volatile organic compounds.
3. The Permittee shall ensure that the drums are "empty" pursuant to RCRA before they are crushed.

AIR EMISSION STANDARDS:

The unit is not subject to the air emission requirements in California Code of Regulations, title 22, chapter 14, article 28.5. Air emissions are considered to be negligible because the drums are empty or nearly empty with less than 500 ppmw of volatile organic compounds.

UNIT NAME:

Unit # 34 - Truck Wash Unit

LOCATION:

The Truck Wash Unit is located south of Tank Farm K (Figures #3, #7 & #8).

ACTIVITY TYPE:

Treatment: Washout and decontaminating bulk tanker trucks.  
Tank Storage in one (1) tank.

ACTIVITY DESCRIPTION:

The Truck Wash Unit consists of a secondary containment area, a storage tank (TW-1) and a truck wash system. The containment area can accommodate up to two tanker trucks in each of two bays for a total of four trucks. The truck wash system consists of a four-compartment truck wash skid and a rack that holds a sprayer.

Tanker trucks that have offloaded hazardous waste may require an internal washout before they can be reloaded. Empty tankers requiring a washout are parked in the Truck Wash Unit where the top dome is opened. An operator lowers a spray nozzle into the dome. The spray nozzle is fed hot or ambient temperature high-pressure water from one of the four compartments from the tank wash skid. The nozzles are designed to spin 360 degrees horizontally and vertically to remove liquid and solid residuals from inside. The initial spray water is pumped and collected in Tank TW-1 to isolate any sludges or concentrated rinsate. If the tanker has more than one dome, this process is repeated until all domes have been opened and rinsed.

After the primary rinse, a second rinse with detergent is sprayed into the tanker. This rinsate is returned to the same compartment in the tank wash skid and circulated back into the tanker being washed. This process is continued until each dome has been cleaned and the operator has ensured all residuals have been removed. The third and final rinse consists of cold potable water to ensure all soapy residuals have been rinsed. The final rinse also cools the shell of the tanker prior to transport or reloading.

The Truck Wash Tank (TW-1) is designed to receive the removed residual liquid and sludge from tanker trucks that are washed. All final rinsates generated are also transferred to Tank TW-1 and are subsequently transferred using a tanker truck to other permitted storage tanks. Wastewater is evaluated for processing through the wastewater treatment system (Unit # 18 Biological Treatment System Unit –Tank Farm K). Solids and sludge collected are consolidated and sent off site for final disposal.



## PHYSICAL DESCRIPTION:

Secondary Containment: The Truck Wash Unit is located within secondary containment. The surface of the Truck Wash Unit containment area is a reinforced concrete measuring about 56 feet by 60 feet. The slab is at least 8 inches thick with ½ inch reinforcing steel spaced 18 inches on center. The height of the berm is 4 inches and is constructed with 4"x2"x1/4" steel tubing bolted to the concrete with epoxy bolts. The containment capacity is sufficient for the tank plus the anticipated rainfall and has an allowance for the displacement of tank footprints. This containment shall be coated to improve impermeability.

Truck Wash System: The Truck Wash System is designed and built to wash out residual liquids and sludges in tanker trucks. All water compatible solvents can be rinsed by the system. The system consists of a remote controlled spray nozzle, a four-compartment tank (liquid holding tanks) mounted on a skid unit (tank wash skid) and two pumps.

The spray nozzle is capable of providing 200°F spray at 180 psig. Water to the spray nozzle is supplied via a 50-hp TEFC centrifugal pump. The tank washer is skid mounted and constructed of carbon steel. The tanker offload pump is a 10-hp explosion proof centrifugal pump. All hard piping is 2" carbon steel schedule 40.

Tank: Tank TW-1 is a polyethylene cylindrical tank that is installed vertically on the slab foundation.

Table IV-46

UNIT NAME	TREATMENT CAPACITY	MAJOR COMPONENTS	CAPACITY (gallons)	ANCILLARY EQUIPMENT
Truck Wash Unit <sup>(1)</sup>	15,000 gal./day	Truck Wash Rack <sup>(1)</sup>	n.a.	Spray nozzle, centrifugal pump, steam coil heating unit, piping, in-basket filter, and air blower
		Tank Wash Skid <sup>(1)</sup> (liquid holding tanks)	2,000	
		Tank TW-1 <sup>(1)</sup>	1,700	

(1) Indicates that the unit is existing but not previously permitted for hazardous waste treatment

Table IV-47

Tank Number	Permit Capacity Gallon	Diameter (feet, inches)	Height <sup>(1)</sup> (feet, inches)	Minimum Shell Thickness (inches)	Configuration Vertical	Construction Material
Tank TW-1	1700	7 feet 2 inches	6 feet 8 inches	.50	Flat bottom	Polyethylene

(1) Height is defined as the total installed height (not including the height of any dome or cone top).

MAXIMUM PERMITTED CAPACITY:

The maximum capacity of total treatment is 15,000 gallons per day.  
The maximum capacity of total tank storage is 1,700 gallons.

WASTE TYPES:

Waste Stream Number	Waste Stream
16	Contaminated tanker trucks

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for the above waste stream, unless specifically excluded in the Unit Specific Special Conditions.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not treat more than 24 contaminated tanker trucks per day.
2. The Permittee shall not store any hazardous waste with a specific gravity greater than 1.4 in Tank TW-1.

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit # 35 - Enhanced Truck Park Areas

LOCATION:

The Enhanced Truck Park Areas include two adjacent areas. Both areas are located south of Tank Farm Q. (Figures #3, & #8)

ACTIVITY TYPE:

Loading and unloading pursuant to Health and Safety Code, section 25200.19  
Storage of contaminated tanker trucks

ACTIVITY DESCRIPTION:

The Enhanced Truck Park Areas are designated areas for the Permittee to receive 1) hazardous wastes directly from offsite locations for unloading into permitted units, 2) wastes from permitted units for loading for offsite shipment, and 3) contaminated tanker trucks. Wastes may be held for up to ten (10) days in the Unit.

PHYSICAL DESCRIPTION:

The Enhanced Truck Park Areas are located in adjacent areas south of Tank Farm Q, southeast of Tank Farm I, and east of Tank Farm K. The surfaces of the two areas are reinforced concrete and are designed to support 20-ton vehicles. The slab is at least six (6) inches thick and reinforced with half-inch steel spaced 18 inches apart. A concrete berm shall be installed to provide containment capacity.

Planned Modifications: Upon issuance of the permit, a berm shall be added to the cement Loading/Unloading Areas. Enhanced Truck Park Area #1 extends 60 feet in the north-south direction and 114 feet in the east-west direction. The second smaller Enhanced Truck Park Area #2 measures about 46 feet long in the east west direction and 46 feet long in the north south direction on the outside perimeter. These concrete areas shall be surrounded by a three (3) inch high concrete curb over a 6 inch thick reinforced concrete slab base. No sump will be located in these bermed areas. The surface shall be treated with a concrete sealer to provide an impermeable layer. The Enhanced Truck Park Area #1 will have sufficient surface area to park 11 trucks side by side and Truck Enhanced Park Area #2 will have capacity for 4 trucks. Physical descriptions for the subject areas are included in Table IV-48.

TABLE IV-48

Enhanced Truck Park Area	Location	Function	Dimensions (in feet)	Number of Transport Vehicles Allowed
Area #1	South of Tank Farm Q	Primary Parking	114.0' x 60.0'	11
Area #2	South of Tank Farm Q	Primary Parking	46.0' x 46.0'	4

MAXIMUM PERMITTED CAPACITY:

Not applicable

WASTE TYPES:

Waste Stream Number	Waste Stream
16	Contaminated tanker trucks
18	Storage and Offsite Transfer

HAZARDOUS WASTE CODES:

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for each of the above waste streams, unless specifically excluded in the Unit Specific Special Condition.

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not store bins in the Enhanced Truck Park Areas.
2. As part of a loading or unloading operation conducted within the boundary of the Facility, the hazardous waste shall not be held longer than 10 days outside of a permitted unit at the Facility. The hazardous waste shall be moved directly between a permitted unit and a transport vehicle and shall not be held for any time off the transport vehicle outside of the permitted unit, except for that incidental period of time that is necessary to safely and effectively move the waste from the transport vehicle to the permitted unit or from the permitted unit to the transport vehicle.
3. The Permittee may park only up to eleven (11) transport vehicles in Enhanced Truck Park Area #1.
4. The Permittee may park only up to four (4) transport vehicles in Enhanced Truck Park Area #2.

5. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule items 8(a) and 8(c).
6. The Permittee shall place absorbent booms as containment during container storage in the Enhanced Truck Parking Areas until such time as the permanent enhanced secondary containment is completed. The Permittee shall inspect this Unit twice daily when trucks are present. The inspection frequency may be reduced to once daily only after the Permittee completes the construction of the approved secondary containment.
7. The Permittee shall only move the hazardous waste directly between permitted storage and treatment units and the Enhanced Truck Park Areas where transport vehicles are parked in either direction.
8. There shall be adequate storage capacity within a permitted unit at the Facility for all hazardous waste being loaded or unloaded. Hazardous waste may not be held on any transport vehicle which, if unloaded, would exceed the permitted storage capacity of the originating or receiving unit at the Facility, unless the waste is held on the transport vehicle as part of a permitted transfer operation.

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

UNIT NAME:

Unit #36 - Truck Loading/Unloading Areas

LOCATION:

There are Seventeen (17) Truck Loading/Unloading Areas located throughout the Facility (Figure #8)

ACTIVITY TYPE:

Loading and Unloading pursuant to Health and Safety Code section 25200.19.  
Transfer pursuant to California Code of Regulations, section 66264.175 and 66264.191.  
Sampling

ACTIVITY DESCRIPTION:

The Truck Loading/Unloading Areas are designated areas for the Permittee to 1) receive bulk hazardous wastes directly from offsite locations for unloading into permitted units, 2) receive bulk wastes from permitted units for loading shipments to offsite facilities, 3) transfer bulk hazardous waste to and from permitted units within the Facility after the waste has been accepted, 4) transfer containerized waste to permitted tanks, and 5) sample hazardous waste.

Loading and Unloading: The Truck Loading/Unloading Areas are designated areas for the Facility to transfer hazardous wastes to and from a permitted unit for unloading and loading operations for duration not to exceed twenty-four (24) hours. These operations include:

- the unloading of containerized hazardous waste into storage buildings,
- the loading of containerized hazardous waste from storage buildings,
- the transfer of hazardous waste from bulk containers into tank systems,
- the transfer of hazardous waste from tanks into bulk containers

The Permittee unloads shipments of containerized hazardous wastes near each of its container storage areas. The majority of the containerized wastes are unloaded into Unit #3 Sampling Area. Transport vehicles are staged near the storage areas and containers of hazardous waste are unloaded and loaded by forklift.

Hazardous Waste carried on the transport vehicles such as tanker trucks are unloaded directly into the Facility's storage/treatment tanks after completion of the acceptance process. The Permittee loads transport vehicles with hazardous waste for off-site shipment to various locations. Hazardous waste fuels are typically transported by truck to the Romic's rail spur facility in Redwood City, California.

Once accepted by the Permittee, the hazardous waste may require storage or treatment in multiple hazardous waste units. Tanker trucks (bulk containers) can be used to move

hazardous waste between the permitted units. Hazardous waste received in drums may be pumped into tanks in two areas referred to as the truck bays. Sampling of hazardous waste in bulk containers is conducted in four locations in this Unit as part of the hazardous waste analysis procedures.

#### PHYSICAL DESCRIPTION:

Loading/Unloading Transfer Within the Facility (17 locations): The Permittee unloads and loads transport vehicles bearing hazardous waste at these locations. All locations are identified on Table IV-49 and Figure 8.

Drum Pumping (2 locations): One truck bay is located between Tank Farm MNO and Tank Farm CLR. The second truck bay is located on the other side of Tank Farm CLR and extends along Tank Farms A and Tank Farm B. The locations are also used for loading and unloading into the nearby tank farms. The truck bays are identified on Table IV-49 and Figure 8.

Sampling (4 locations): Sampling is conducted primarily in an area located southwest of Tank Farm I and south of the production area. The three other locations for the sampling of bulk containers are identified on Table IV-49 and Figure 8.

Planned Modifications: Upon issuance of the permit, minor repairs will be made to small areas to comply with containment requirements for unloading and loading operations.

TABLE IV-49

Location	Function	Nearest Permitted Unit
East of Sampling Area	Primary Unloading	Sampling Area, South Storage Building
East of South Storage Building	Primary Unloading	Sampling Area, South Storage Building, North Storage Building Consolidation Booth
Truck bay between Tank Farm CLR and Tank Farm A	Primary Unloading Drum Pumping	Tank Farm A, Tank Farm B Tank Farm CLR Production Area
West of Tank Farm I	Primary Unloading	Tank Farm I Tank Farm J
East of Tank Farm Q	Primary Unloading	Tank Farm Q
West of Sampling Area	Other Unloading or Loading	Sampling Area
Truck bay between Tank Farm MNO and Tank Farm CLR	Other Unloading or Loading Drum Pumping	Tank Farm CLR Tank Farm MNO
West of Tank Farm H and Tank Farm G	Other Unloading or Loading	Tank Farm H Tank Farm G
East of West Storage Building #2	Other Unloading or Loading	West Storage Building #2

Location	Function	Nearest Permitted Unit
South of proposed Tank Farm E	Other Unloading or Loading	Tank Farm E
East of Tank Farm E	Other Unloading or Loading	Tank Farm E Liquefaction and Debris Shredder
South of proposed Tank Farm S	Other Unloading or Loading	Tank Farm S
South of West Storage Building #1	Other Unloading or Loading	West Storage Building #1
East of West Storage Building #1	Other Unloading or Loading	West Storage Building #1
South of proposed Tank Farm T	Other Unloading or Loading	Tank Farm T
North of Tank Farm K	Sampling Other Unloading or Loading	Tank Farm K
East of Tank Farm B and Tank Farm D	Sampling Primary Loading Primary Unloading	Tank Farm B Tank Farm D Tank Farm HTU
North of Tank Farm MNO	Sampling	Tank Farm MNO
Truck Wash Unit	Sampling	Tank Farm K

**MAXIMUM PERMITTED CAPACITY:**

Not Applicable

**WASTE TYPES:**

Waste Stream Number	Waste Stream
18	Storage and Offsite Transfer

**HAZARDOUS WASTE CODES:**

The Permittee may accept only wastes identified by the hazardous waste codes listed in Table 1 for the above waste stream, unless specifically excluded in the Unit Specific Special Condition.



UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall only allow one transport vehicle in any one of the transfer areas specified in the Table IV-49.
2. No transport vehicles shall be allowed in this Unit for any time longer than what is necessary to safely and effectively move the waste from the transport vehicle to the permitted unit or from the permitted unit to the transport vehicle, but in no event shall it exceed twenty-four (24) hours.
3. The Permittee shall use USDOT-certified vehicles for all transfers made by a tanker trucks.
4. The Permittee shall inspect the Unit once daily while the unit is in use.
5. The Permittee shall upgrade the unit according to Section VII, Compliance Schedule item 8(a), 8(c), 9(a), 9(b) and 9(j).

AIR EMISSION STANDARDS:

The Permittee must comply with the requirements specified in California Code of Regulations, title 22, chapter 14, article 28.5, Air Emission Standards for Tanks, Surface Impoundments, and Containers.

## **PART V - SPECIAL CONDITIONS**

1. The Permittee is prohibited from any transfer, storage, or treatment activity not specifically described in Part II, III and IV of this Permit.
2. Hazardous waste shall not be land disposed at the Facility, whether temporarily or permanently.
3. The maximum total treatment capacity is 154,512 gallons per day for all treatment units. The permitted capacity of individual units is listed on Table 3.
4. The maximum total container storage capacity is 317,355 gallons plus 320 cubic yards in roll-off bins. The permitted capacity of individual units is listed on Table 3.
5. The maximum total tank storage capacity is 793,454 gallons. The permitted capacity of individual units is listed on Table 3.
6. For the purpose of compliance with permitted capacity limitations, all containers in the permitted units are assumed to be full.
7. The maximum total permitted capacity of each unit shall be the capacity specified in Maximum Permitted Capacity for each unit.
8. Hazardous waste described below shall not be handled at the Facility:
  - (a) Extremely hazardous wastes as defined in California Code of Regulations, title 22, sections 66261.110 or 66261.113; and
  - (b) Hazardous Waste of Concern as defined in California Code of Regulations, title 22, sections 66261.23(a)(6), (a)(7) or (a)(8) or USDOT Hazard Class 1, Divisions 1.1, 1.2 or 1.3;
9. The Permittee shall only store, but not treat reactive waste as defined by , California Code of Regulations, title 22, section 66261.23.
10. The Permittee shall comply with waste discharge requirements issued by the Regional Water Quality Control Board, San Francisco Bay Region.
11. This Permit authorizes operation of the permitted Units and activities listed in Parts II, III and IV subject to the conditions specified herein. The Permittee shall not transfer, store, or treat hazardous wastes in any unit other than the Units specified in Part IV. Any modifications to the designated Unit or permitted activities require a written request and written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, sections 66270.41, 66270.42 and 66270.42.5

12. The Permittee shall not store hazardous waste in excess of one calendar year from the time such waste was first stored.
13. Containers storing ignitable or reactive waste shall be situated at least fifty (50) feet from the property line of the Facility.
14. Hazardous waste shall not be placed in an unwashed tank or container including tanker trucks that previously held an incompatible waste.
15. Impermeable physical barriers such as berms, dikes, or dedicated secondary containment shall be used to ensure that commingling of incompatible hazardous wastes does not occur.
16. All rainwater and/or wash water accumulated in secondary containment areas shall be managed as hazardous waste in accordance with the procedures specified in the Operation Plan.
17. Hazardous waste shall be stored only in USDOT-approved containers.
18. Containers and tanks holding hazardous wastes shall be stored only in the permitted areas designated in Part IV of this Permit. Any non-hazardous waste that is stored in a designated hazardous waste storage area as provided by this permit shall be included in all volume calculations set forth in this permit.
19. A minimum aisle space of thirty-six (36) inches shall be maintained between container pallets to allow for movement of emergency equipment and personnel except for Unit #6 – Drum Pumping Area which shall have aisle spacing no less than twenty-four (24) inches.
20. Containers of hazardous waste shall not be stacked more than two containers high, except that no containers shall be stacked in the Sampling Area.
21. The Permittee shall only stack containers in a safe manner and shall not allow the containers to lean. Pallets may be used for additional stability and safety.
22. Containers shall not be double stacked unless the Permittee has container specifications that document that containers were designed to be stacked.
23. Whenever offsite waste is consolidated or repackaged, the Permittee shall mark the new container with a bar code, in lieu of hazardous waste labels. The Permittee shall track the movement of the container and the earliest date of the waste that is being received by the Permittee.
24. The Permittee shall operate the permitted tanks only at atmospheric pressure except as otherwise provided in this permit.

25. The Permittee shall measure tank shell thickness as specified in the DTSC-approved engineering certifications to ensure compliance with the minimum shell thickness specified in Part IV of this permit for storage and treatment tanks.
26. The Permittee is allowed to construct new units according to the DTSC-approved design plans in the Operation Plan dated November 2001, Revised April 2005. The Permittee shall notify DTSC at least 14 days prior to installation and construction. The Permittee shall submit the as-build drawings, and engineering certifications for DTSC's review and approval. The certification shall be signed by an independent professional engineer registered in California ("registered engineer") and shall state that each unit has been constructed in accordance with the approved design plans and local building codes. The Permittee is not authorized to modify the approved plans or operate the units until DTSC issues a written approval.

Prior to operating the new units, the Permittee shall submit documentation to DTSC to demonstrate full compliance with the financial assurance requirements for the increased closure cost estimates related to the operation of the new units.

All documents pertaining to the design, construction, assessment, and certification of the tanks and secondary containment areas as well as the inspection forms and training plans pertaining to the newly constructed units shall be incorporated by reference into the Operation Plan upon written approval by DTSC.

27. The Permittee shall inspect and ensure containers are in good condition and not leaking or bulging. The inspection results shall be recorded in the inspection log in accordance with title 22, California Code of Regulations, section 66264.15(d). To ensure its compliance, the Permittee shall handle all defective containers in the following manner:
  - (a) All containers found leaking shall be immediately addressed in accordance with the Permittee's container management protocols and recorded in the inspection log to ensure proper tracking of said container.
  - (b) All containers found bulging shall be immediately addressed in accordance with the Permittee's container management protocols. The date and time of venting shall be recorded directly on the drum in question.
  - (c) If a second venting is required, the Permittee shall, if technically possible, immediately treat the contents of said drum onsite in order to prevent further bulging. If the previously vented drum contains waste that the Permittee is not otherwise authorized to treat, then the Permittee shall treat the waste pursuant to the authority in title 22, California Code of Regulations, section 66264.1(g)(8)(A). The Permittee shall document the treatment in the operating record to ensure proper tracking of said hazardous waste. Within fifteen (15) calendar days of treating the waste, the Permittee shall provide DTSC with a written report identifying the waste type, quantity and method of treatment.

- (d) If a second venting is required and the Permittee is not technically equipped to immediately treat the contents of said drum onsite in order to prevent further bulging, the Permittee shall vent the drum in accordance with the Permittee's container management protocols, overpack the vented drum as appropriate, and ship the drum offsite for treatment within seventy-two (72) hours. These actions shall be recorded in the inspection log to ensure proper tracking of said container.
- 28. If the Permittee rejects a shipment of hazardous waste after receipt, the Permittee shall transport the hazardous waste, accompanied by a new hazardous waste manifest, to either the generator or an alternate facility designated by the generator within ten (10) day of receipt.
- 29. Upon the effective date of this Permit, the Permittee shall be in full compliance with the financial assurance requirement for the closure cost estimates for all the units, operations, and activities that exist at the time when this Permit takes effect.

## **PART VI. CORRECTIVE ACTION**

The Permittee is currently conducting corrective action under the oversight of the United States Environmental Protection Agency (USEPA) Region 9 Office in accordance with the Corrective Action Consent Agreement pursuant to RCRA section 3008(h) entered into between USEPA and Romic Chemical Corporation. The effective date of the Order is December 8, 1988. The corrective action oversight activities may be transferred from USEPA to DTSC at a later time.

A RCRA Facility Assessment (RFA) was conducted at the Facility and a report summarizing the findings was prepared jointly by the California Department of Health Services, AT Kearney, and Science Applications International Corporation in November of 1989. The RFA report identified twenty (20) solid waste management units (SWMUs).

In the event the Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers new Solid Waste Management Units (SWMUs) not previously identified, the Permittee shall notify DTSC orally within 24 hours of discovery and notify DTSC in writing within 10 days of such discovery summarizing the findings including the immediacy and magnitude of any potential threat to human health and/or the environment.

DTSC may require the Permittee to investigate, mitigate and/or take other applicable action to address any immediate or potential threats to human health and/or the environment and newly identified releases of hazardous waste and/or hazardous constituents. For newly identified releases, SWMUs, or Areas of Concern, the Permittee is required to conduct corrective action under DTSC oversight. Corrective action will be carried out either under a Corrective Action Consent Agreement between DTSC and the Permittee or a Corrective Action Enforcement Order issued by DTSC pursuant to Health and Safety Code sections 25187 and 25200.10.

## **PART VII. COMPLIANCE SCHEDULE**

The Permittee shall implement the following modifications of this Permit in order to comply with California Code of Regulations., title 22, sections 66264.175 and section 66264.193. The start date for the following compliance schedule is based on the effective date of this permit.

1. Pursuant to California Code of Regulations, title 22, section 66270.16, the Permittee shall submit to DTSC for its review and approval a new written assessment certified by a registered engineer which certifies that the work has been completed in accordance with the structural certifications and design plans provided by Tank Design, Inspection & Certification Services (TI&CS). Engineering design plans and specifications were reviewed and approved by DTSC. These assessments shall be valid until June 2008, or five (5) years from the effective date of this permit, or if a leak or damage is detected in a tank, which ever comes first. Where a leak or damage is detected in a tank, a new tank integrity assessment certification for this tank shall be submitted to DTSC for approval within sixty (60) days of the repair or replacement. The affected tank shall not be put back into service until the Permittee receives written permission from DTSC.

Within three (3) months of the effective date of this Permit, the registered engineer shall certify the following:

- (a) Submittal of a Closure Certification Report for the closure of Tank A, Tank B, Tank C, Tank D, Tank E, Tank F, Tank G, Tank H, Tank I, Tank J. and the Rotary Vacuum Unit previously located in Tank Farm I.
- (b) Completion of the new concrete footing and the addition of new base plates to the legs as outlined in TI&CS Report #02-12-28 for Vac Pot 24.
- (c) Completion of the new concrete footing and the addition of new base plates to the legs as outlined in TI&CS Report #02-12-29 for Vac Pot 25 .
- (d) Completion of the tank leg modification and the additional concrete foundation upgrades as outlined in TI&CS Report #02-12-6 for Reboiler 35.
- (e) Completion of the tank reinforcement as outlined in TI&CS Report #02-10-40A for Tanks NT-1, NT-2 and NT-3.
- (f) The Permittee shall install the tank anchoring and additional concrete foundation upgrades for Tanks 101, 102, 103, and 104 within the secondary containment system for the Tank Farm I Unit. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-09-34.
- (g) Completion of the upgrades for the tank legs, installation of additional anchor bolts and the additional concrete foundation upgrades as outlined in TI&CS Report #04-9-30 for Tanks R91, R92, R93, R94 and R95.

- (h) Completion of the application of the concrete sealant to the secondary containment system for the following areas:
    - 1. Sampling Area
    - 2. Drum and Debris Processing Building
    - 3. North Storage Building
    - 4. West Storage Building #2
    - 5. South Storage Building
    - 6. Tank Farm J
    - 7. Tank Farm Q
  - (i) Submittal of a certification for closure of previously permitted units that is not included in this permit. These units were authorized in the permit issued on May 21, 1986 but were not constructed, installed or used for hazardous waste management. The Permittee shall submit closure certifications for the following waste management units:
    - 1. Refrigerant Distillation Unit (Tank Farm F)
    - 2. Reverse Osmosis Unit (Tank Farm I)
    - 3. Oil Filter (Tank Farm I)
    - 4. Oil Filter - ethylene glycol (Production Area)
    - 5. Ion Exchange Bed (Tank Farm F)
    - 6. Regeneration Unit (Tank Farm F)
    - 7. Electro-Deposition Unit (Tank Farm F)
    - 8. Tank Storage Unit A-1 (Tank Farm F)
  - (j) The Permittee shall notify DTSC in writing, and provide the as built drawings, photographs and certifications from a registered engineer within one (1) week after completion of the modifications listed in (1)(a) through (1)(j).
2. Within six (6) months of the effective date of this Permit,
- (a) The Permittee shall increase the containment volume outlined in TI&CS Report #04-9-21 and shall increase the thickness of the foundation as outlined in TI&CS Report #04-9-24 for the High Temperature Unit (HTU) Tank Farm.
  - (b) Completion of the weld bracing of members between leg supports; the addition of 7" of concrete to the footing; testing of the three of the existing anchor bolts, and installation of new anchor bolt system outlined in TI&CS Report #04-9-24, Report #04-9-22, and Report #04-09-21 for the High Temperature Unit (HTU) Tank Farm and additional tank stiffeners outlined in TI&CS Report #04-6-25 for tank HTU.
  - (c) Completion of the tank reinforcement as outlined in TI&CS Report #04-9-29 for the Tank PT-1 (Liquefaction Product Tank).



- (d) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and certifications from a registered engineer within one (1) week after completion of the modifications listed in (2)(a) and (2)(b).
3. Within six (6) months of the effective date of this Permit,
- (a) The Permittee shall install the tank anchoring and additional concrete foundation upgrades for Tanks AES-1, AES-2, AES-3 and AES-4 within the secondary containment system for the Tank Farm Q Unit. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #02-11-16.
  - (b) The Permittee shall complete the modification of the tank legs for Tanks 16, 17, 19, and 20 and install the additional tank anchoring and concrete foundation upgrades for Tank 18 within the secondary containment system for the Tank Farm G Unit. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-9-27 and Report # 02-11-40.
  - (c) The Permittee shall complete the modification of the tank legs, install the additional tank anchoring and concrete foundation upgrades for Tank 21 within the secondary containment system for the Tank Farm G Unit. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #02-12-37.
  - (d) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and certifications from a registered engineer within one (1) week after completion of the modifications listed in 3 (a), 3(b) and 3 (c) .
4. Within nine (9) months of the effective date of this Permit,
- (a) The Permittee shall complete the modification of the tank legs, install the additional tank anchoring and concrete foundation upgrades for the Caustic Reboiler within the secondary containment system for the Production Area. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-9-38.
  - (b) The Permittee shall complete the additional tank stiffeners outlined in TI&CS Report #04-6-25 and the modification of the tank legs and concrete foundation upgrades for the Stainless Steel Kettle within the secondary containment system for the Production Area. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-9-32.
  - (c) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and certifications from a registered engineer within one (1) week after completion of the modifications listed in 4(a) and 4(b).

5. Within twelve (12) months of the effective date of this Permit,
- (a) The Permittee shall complete the anchorage upgrades for Tanks 2, 3, 5, 6, 7, 9, 10, and 11 within the secondary containment system for Tank Farm A. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #2-7-3.
  - (b) The Permittee shall complete the anchorage upgrades for Tanks 5 and 9 within the secondary containment system for Tank Farm A. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #2-7-22.
  - (c) The Permittee shall complete the anchorage upgrades for Tanks 26, 27, 28, 29, 30 and 31 within the secondary containment system for Tank Farm H. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #2-7-24.
  - (d) The Permittee shall complete the anchorage upgrades for Tanks 32, 33, 34, 35, 36, 37, 38, 39, 39, 40, 41, 42, and 43 within the secondary containment system for Tank Farm MNO. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #2-7-24.
  - (e) The Permittee shall complete the anchorage upgrades for Tanks 44, 45, 46 and 47 within the secondary containment system for Tank Farm CLR. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #2-7-24.
  - (f) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and certifications from a registered engineer within one (1) week after completion of the modifications listed in 5(a) through (5)(d).
6. Within fifteen (15) months of the effective date of this Permit,
- (a) The Permittee shall complete the anchorage upgrades and install the concrete foundation upgrades for Tanks 48, 49, and 50 within the secondary containment system for Tank Farm CLR. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-9-26.
  - (b) The Permittee shall complete the testing of the anchor bolt assemblies and if necessary, install the anchorage upgrades and concrete foundation upgrades for Tanks T-13, B-2, B-3, B-3A, B-5, B-6, B-6A, B-7, SF-1, and SF-2 within the secondary containment system for Tank Farm K. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Reports #02-12-23 (T-13) , #02-12-18 (B-2), #02-12-26 (B-3), #02-12-17 (B-3A), #02-12-19 (B-5), #02-12-22 (B-6), #02-12-25 (B-6A) #02-12-24 (B-7), #03-1-16 (SF-1) and #03-1-15 (SF-2).

- (c) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and certifications from a registered engineer within one (1) week after completion of the modifications listed in 6(a) and 6(b).

7. Within eighteen (18) months of the effective date of this Permit,

- (a) The Permittee shall complete the concrete foundation upgrades for Tanks 4, 8, and 12 within the secondary containment system for Tank Farm A. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-9-23.
- (b) The Permittee shall complete the modification of the tank legs for Tanks K, L, and M within the secondary containment system for Tank Farm A. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-9-20.
- (c) The Permittee shall install new concrete foundation upgrade and new anchor lugs for Tank R49 (Reboiler 49) within the secondary containment system for Tank Farm G. These seismic upgrades shall be constructed as outlined in design plans included in TI&CS Report #04-9-25.
- (d) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and a certification from a registered engineer within one (1) week after completion of the modifications listed in (7)(a), (7)(b) and (7)(c).

8. Within twenty-one (21) months of the effective date of this Permit,

- (a) The Permittee shall construct the enhanced secondary containment areas for the Enhanced Truck Park Area. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Truck Parking Containment dated August 20, 2002.
- (b) The Permittee shall construct the enhanced secondary containment areas for the Drum Pumping Area adjacent to the Sampling Building. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Drum Pumping Area dated August 20, 2002.
- (c) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and certification from a registered engineer within one (1) week after completion of the modifications listed in 8(a) and 8(b).

9. Within twenty-four (24) months of the effective date of this Permit,
- (a) The Permittee shall modify the Truck Loading/Unloading Bay (Area A) located between Tank Farm CLR and Tank Farm MNO to increase containment capacity. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Truck Parking Containment dated August 20, 2002.
  - (b) The Permittee shall modify the Truck Loading/Unloading Bay (Area B) located between Tank Farm B and Tank Farm CLR to increase containment capacity. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Truck Parking Containment dated August 20, 2002.
  - (c) The Permittee shall modify Tank Farm Q to increase the available secondary containment. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Tank Farm Q dated November 17, 2001.
  - (d) The Permittee shall modify Tank Farm CLR to combine the available secondary containment area. This modification shall be constructed as outlined in design plans prepared by C.L. Alfaro Associates for Tank Farm CLR dated January 22, 2004.
  - (e) The Permittee shall modify the Production Area to increase containment capacity. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Secondary Containment, Process/Production Area dated April 6, 2001.
  - (f) The Permittee shall modify Tank Farm G to increase containment capacity. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Tank Farm G dated November 17, 2001.
  - (g) The Permittee shall complete the repairs for the concrete within the general plant area to improve containment within the Facility. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for Site Secondary Containment Information dated August 20, 2002.
  - (h) The Permittee shall modify West Storage Building#1 to increase the containment capacity. This modification shall be constructed as outlined in design plans prepared by Mr. Steve Arnold for West Storage Building #1 dated October 25, 2001.

- (i) The Permittee shall apply a concrete sealant to the secondary containment system for the following areas:
    - 1. Tank Farm A
    - 2. Tank Farm B
    - 3. Tank Farm CLR
    - 4. Tank Farm G
    - 5. Tank Farm H
    - 6. Tank Farm I
    - 7. Tank Farm K
    - 8. Tank Farm MNO
  - (j) The Permittee shall notify DTSC in writing, and provide the as-built drawings, photographs and a certification from a registered engineer within one (1) week after completion of the modifications listed in 9 (a) through (9)(i).
10. All documents pertaining to the design, construction, assessment, and certification of the tanks and secondary containment areas shall be incorporated by reference into the Operation Plan upon written approval by DTSC.

### COMPLIANCE SCHEDULE SUMMARY

COMPLIANCE PART VII SECTION	EQUIPMENT, AREA, OR ITEM	ACTION NECESSARY	DUE DATE from Permit Effective Date
(1)(a)	Tanks A–J	Submittal of Closure Certification Report.	3 Months
(1)(b)	Vac Pot 24	Completion of foundation upgrades.	3 Months
(1)(c)	Vac Pot 25	Completion of foundation upgrades.	3 Months
(1)(d)	Tank R35	Completion of foundation upgrades.	3 Months
(1)(e)	Tanks NT-1, NT-2 and NT-3	Completion of foundation upgrades	3 Months
(1)(f)	Tanks 101, 102, 103, and 104	Complete the foundation upgrades	3 Months
(1)(g)	Tanks R91, R92, R93, R94, and R95	Completion of foundation upgrades.	3 Months
(1)(h)	Sampling Area Liquefaction/Drum Processing Building North Storage Building West Storage Building #2 South Storage Building Tank Farm J Tank Farm Q	Completion of treatment of slab foundations with concrete sealer.	3 Months
1(i)	Refrigerant Distillation Unit Reverse Osmosis Unit Oil Filter Oil Filter - ethylene glycol Ion Exchange Bed Regeneration Unit Electro-Deposition Unit Tank Storage Unit A-1	Closure Certification for authorized units that are not included in the current permit.	3 Months
(1)(j)	(1)(b), (1)(c), (1)(d), (1)(e), (1)(f), (1)(g), (1)(h), and (1)(i),	As built drawings, photographs, and certifications of the completed upgrades.	3 Months
(2)(a) and (b)	Tank Farm HTU	Increase the secondary containment volume and upgrade the foundation. Addition of tank stiffeners.	6 Months + 1 Week
(2)(c)	Tank PT-1 (Liquefaction Product Tank)	Completion of foundation upgrades.	6 Months + 1 Week
(2)(d)	2(a), 2(b) and 2(c)	As built drawings, photographs, and certifications of the completed upgrades.	6 Months + 1 Week
(3)(a)	Tanks AES-1, AES-2, AES-3, and AES-4	Completed foundation upgrades.	6 Months + 1 Week
(3)(b)	Tanks 16–20	Completed foundation upgrades.	6 Months + 1 Week
(3)(c)	Tank 21	Completed foundation upgrades.	6 Months + 1 Week
(3)(d)	(3)(a), (3)(b), and (3)(c)	As built drawings, photographs, and certifications of the completed upgrades.	6 Months + 1 Week

(4)(a)	Caustic Reboiler	Completed foundation upgrades.	9 Months + 1 Week
(4)(b)	Stainless Steel Kettle	Completed foundation upgrades. Addition of tank stiffeners.	9 Months + 1 Week
(4)(c)	(4)(a), and (4)(b)	As built drawings, photographs, and certifications of the completed upgrades.	9 Months + 1 Week
(5)(a)	Tanks 2, 3, 5, 6, 7, 9, 10, and 11	Completed foundation upgrades.	12 Months + 1 Week
(5)(b)	Tanks 26, 27, 28, 29, 30, and 31	Completed foundation upgrades.	12 Months + 1 Week
(5)(c)	Tanks 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, and 43	Completed foundation upgrades.	12 Months + 1 Week
(5)(d)	Tanks 44, 45, 46, and 47	Completed foundation upgrades.	12 Months + 1 Week
(5)(e)	(5)(a), (5)(b), (5)(c), and (5)(d)	As built drawings, photographs, and certifications of the completed upgrades.	12 Months + 1 Week
(6)(a)	Tanks 48, 49, and 50	Completed foundation upgrades.	15 Months + 1 Week
(6)(b)	Biological Wastewater Treatment System tanks (Tank Farm K)	Completed foundation upgrades.	15 Months + 1 Week
(6)(c)	(6)(a) and (6)(b)	As built drawings, photographs, and certifications of the completed upgrades.	15 Months + 1 Week
(7)(a)	Tanks 4, 8, and 12	Completed foundation upgrades.	18 Months + 1 Week
(7)(b)	Tanks K, L, and M	Completed foundation upgrades.	18 Months + 1 Week
(7)(c)	Tank R49	Completed foundation upgrades.	18 Months + 1 Week
(7)(d)	(7)(a), (7)(b) and (7)(c)	As built drawings, photographs, and certifications of the completed upgrades.	18 Months + 1 Week
(8)(a)	Enhanced Secondary Containment, Truck Parking	Construction of the enhanced secondary containment areas.	21 Months + 1 Week
(8)(b)	Drum Pumping Area	Construction of the secondary containment for the Drum Pumping Area.	21 Months + 1 Week
(8)(c)	(8)(a) and (8)(b)	As built drawings, photographs, and certifications of the completed upgrades.	21 Months + 1 Week
(9)(a)	Truck Loading/Unloading Bay (Area A)	Construction of the enhanced secondary containment areas.	24 Months + 1 Week
(9)(b)	Truck Loading/Unloading Bay (Area B)	Construction of the enhanced secondary containment areas.	24 Months + 1 Week
(9)(c)	Tank Farm Q	Completion of the upgrade to the containment berm.	24 Months + 1 Week

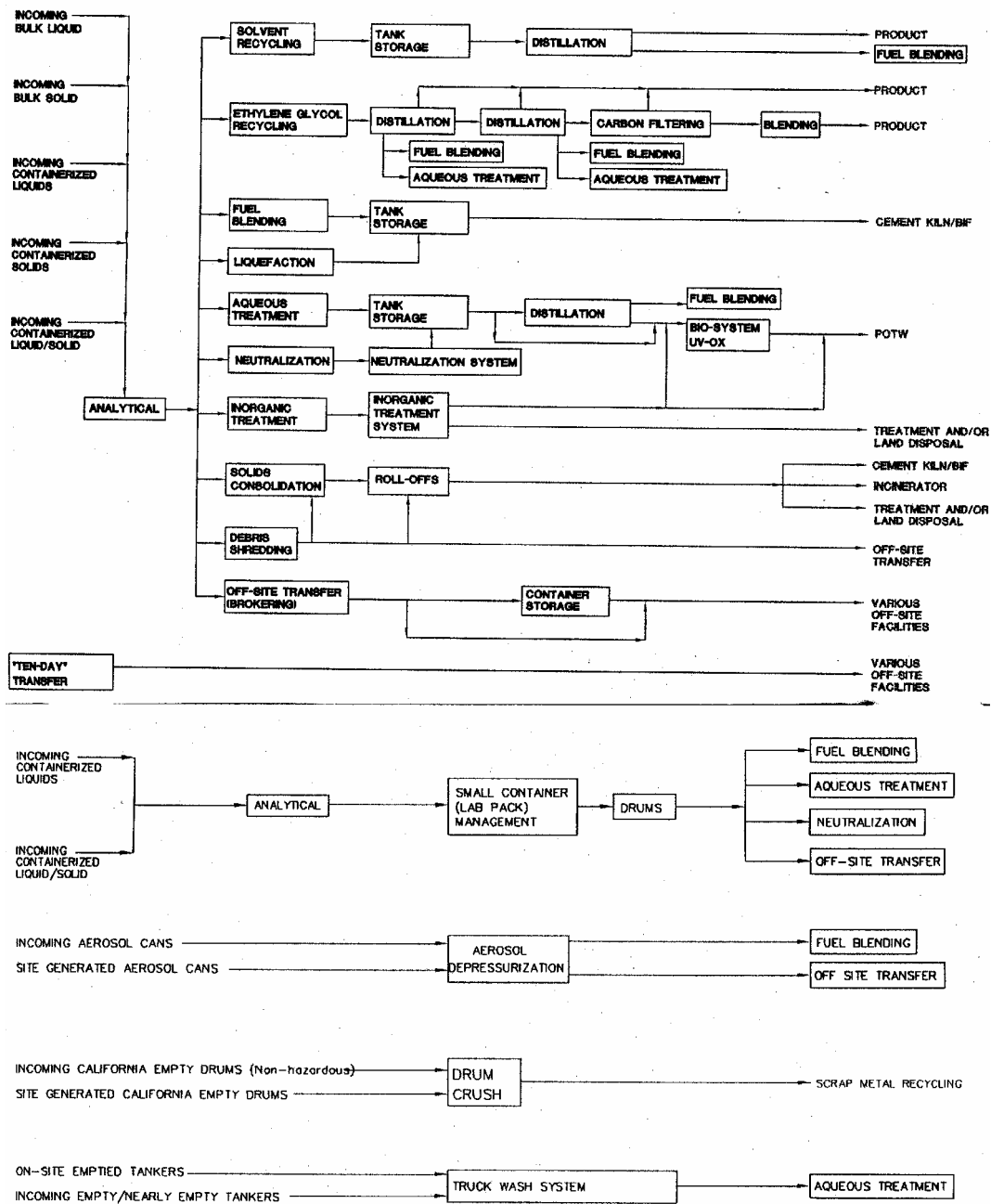
(9)(d)	Tank Farm C/existing Tank Farm R	Completion of the upgrade to the secondary containment.	24 Months + 1 Week
(9)(e)	Production Area	Completion of the upgrade to the secondary containment.	24 Months + 1 Week
(9)(f)	Tank Farm G	Completion of the upgrade to the secondary containment.	24 Months + 1 Week
(9)(g)	General Plant areas	Completion of the upgrade to the secondary containment.	24 Months + 1 Week
(9)(h)	West Storage Building #1	Completion of the upgrade to the secondary containment.	24 Months + 1 Week
(9)(i)	Tank Farm A Tank Farm B Tank Farm CLR Tank Farm G Tank Farm H Tank Farm I Tank Farm K Tank Farm MNO	Completion of treatment of slab foundations with concrete sealer.	24 Months + 1 Week
(9)(j)	(9)(a), (9)(b), (9)(c), (9)(d) (9)(e), (9)(f), (9)(g), (9)(h), (9)(i), and (9)(j)	As built drawings, photographs, and certifications of the completed upgrades.	24 Months + 1 Week



**FIGURE 1  
FACILITY LOCATION MAP**

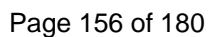
**(Disclaimer: Note for web viewers, figure 1 is in a  
separate file due to the large file size.  
This blank page for figure 1 is  
not the official figure 1.)**

**FIGURE 2**  
**PROCESS FLOW CHART**



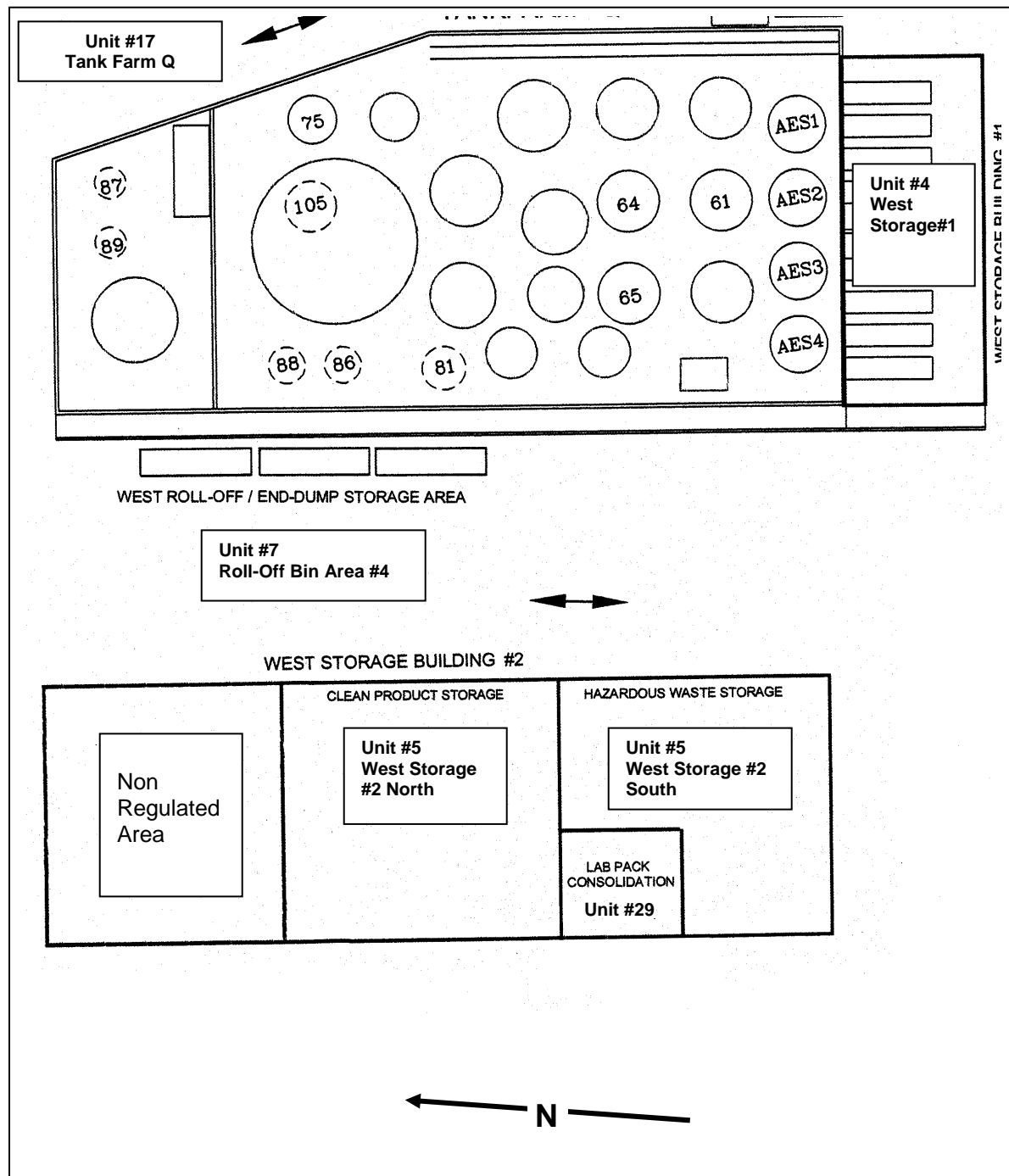
**FIGURE 3  
FACILITY SITE MAP  
GENERAL**

**(Disclaimer: Note for web viewers, figure 3 is in a  
separate file due to the large file size.  
This blank page for figure 3 is  
not the official figure 3.)**

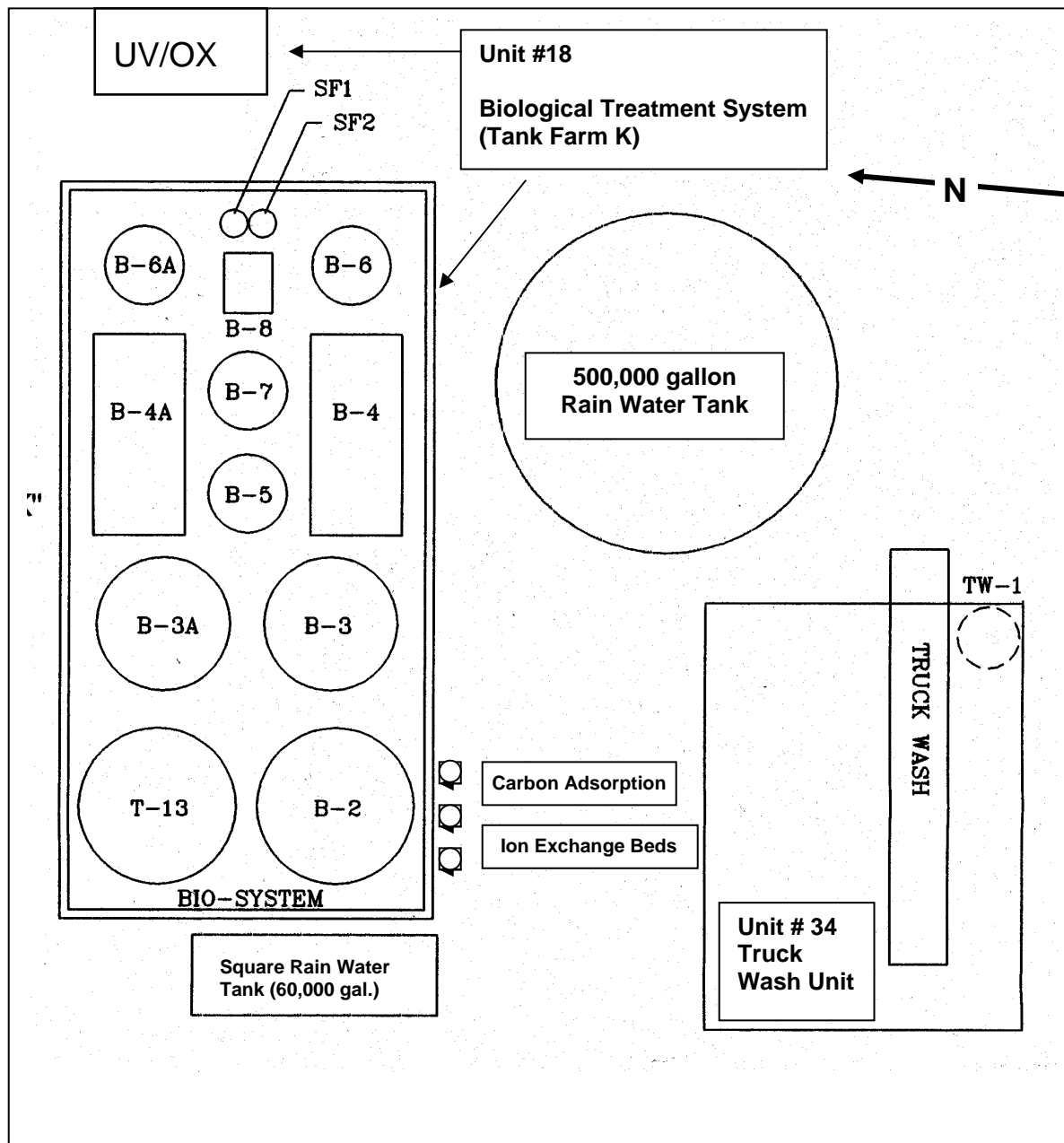




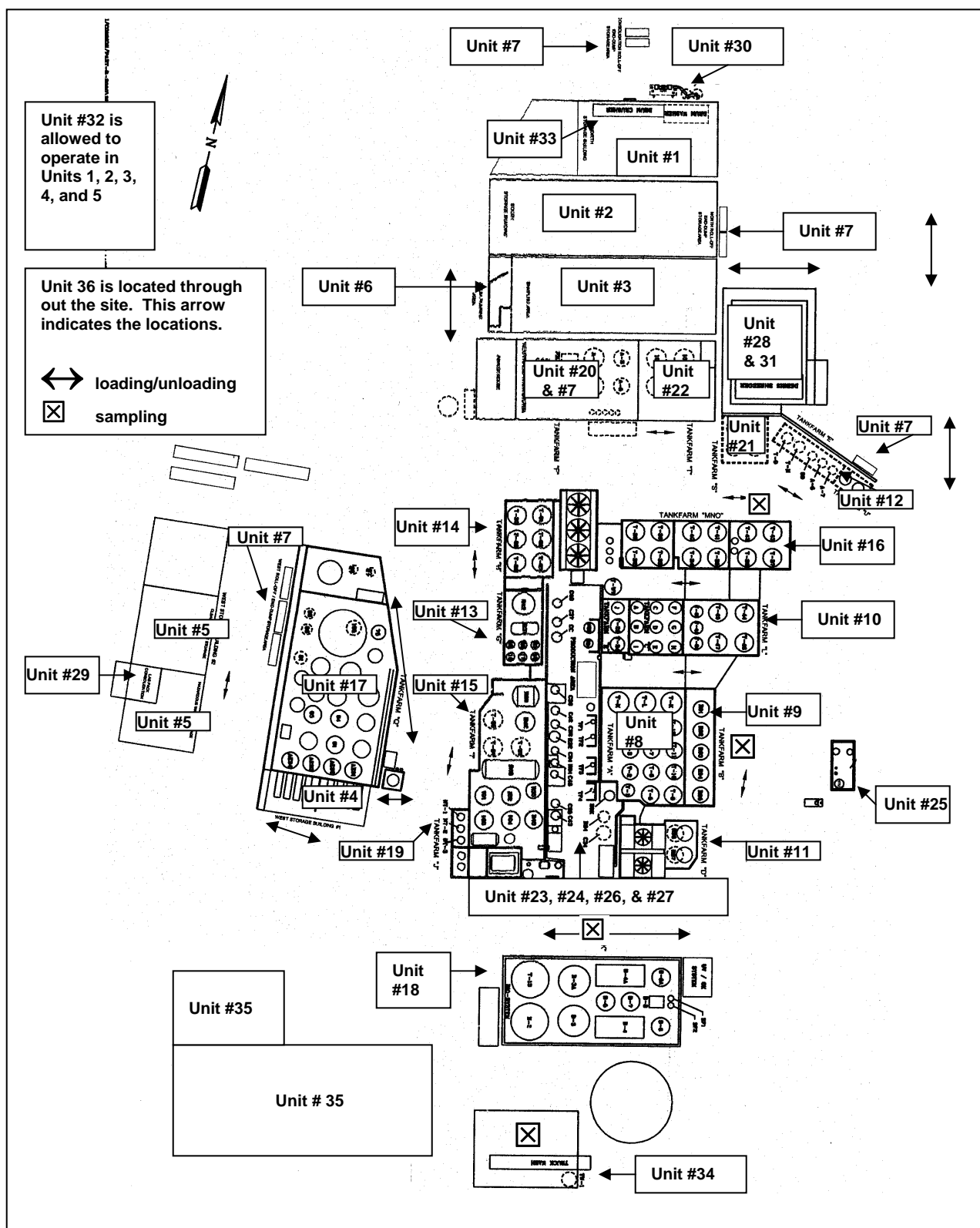
**FIGURE 6**  
**DRUM STORAGE AND TANK STORAGE DETAILS**



**FIGURE 7**  
**WATER TREATMENT DETAILS**



**FIGURE 8  
 SITE PLAN WITH DETAILS**





**TABLE 1**  
**WASTE STREAMS**

<b>Waste Stream Number</b>	<b>Common Name and Typical Wastes</b>	<b>Typical Management Methods</b>	<b>Authorized U.S. EPA RCRA Waste Code &amp; California Waste Codes (CWC)</b>
1	Non chlorinated solvents such as acetone, lacquer thinner, methyl ethyl ketone, n-methyl pyrrolidone, mineral spirits, N-butyl acetate tetrahydrofuran, toluene, xylene	Solvent Recycling	<b>RCRA:</b> D001, D004-D011, D018, D023-D026, D035, D036, D038, F003-F005, K048-K052, P005, U002, U003, U019, U031, U056, U057, U112, U140, U154, U159, U161, U188, U213, U220, U239  <b>CWC:</b> 211, 212, 214, 251, 252, 331, 342, 343, 551, 612, 721, 722, 723, 724, 725, 726, 727, 728
2	Chlorinated solvents such as methylene chloride, perchloroethylene, trichloroethylene, trichloroethane	Solvent Recycling	<b>RCRA:</b> D001, D019, D020, D021, D022, D027, D028, D032, D033, D034, D039, D040-D043, F001, F002, K086, U037, U070, U071, U072, U080, U121, U208, U209, U210, U226, U228  <b>CWC:</b> 211, 212, 213, 214, 251, 252, 331, 341, 342, 343, 551, 612, 721, 722, 723, 724, 725, 726, 727, 728, 741, 751
3	Waste antifreeze including ethylene glycol, propylene glycol, triethylene glycol,	Ethylene Glycol Recycling	<b>RCRA:</b> D001, D008  <b>CWC:</b> 132, 133, 134, 135, 343, 612
4	Wastes with high BTU value such as paint, thinner, hydrocarbon solvents, machine and hydraulic oils, alcohols, gasoline, diesel, and inks.	Fuel Blending	<b>RCRA:</b> D001, D002, D004-D011, D018, D019, D021-D030, D032-D036, D038-D042, F001-F005, F037, F038, K048-K052, K086, K087, K159, K169, K170, P005, U002, U003, U004, U019, U031, U037, U043, U044, U051, U052, U055, U056, U057, U070, U071, U072, U080, U108, U112, U121, U122, U140, U154, U159, U161, U171, U188, U208-U211, U213, U220, U226, U228, U239  <b>CWC:</b> 133-135, 161, 162, 181, 211-214, 221-223, 231, 241, 251, 252, 261, 271, 272, 281, 291, 311, 331, 341, 342, 343, 351, 352, 451, 461, 471, 491, 551, 612, 721-728, 741, 751, 791, 792
5	Semi-solid or solids dispersible organic bearing material with high BTU	Liquefaction	<b>RCRA:</b> D001, D002, D004-D015, D018-D036, D038-D043, F001-F005, F037, F038, K048-K052,

Waste Stream Number	Common Name and Typical Wastes	Typical Management Methods	Authorized U.S. EPA RCRA Waste Code & California Waste Codes (CWC)
	value such as paint sludges, greases, spill clean up residuals where the absorbent used had heat content		K086, K087, K156, K169-K172, U002, U003, U019, U031, U037, U043, U044, U051, U052, U055, U056, U057, U070, U071, U072, U080, U108, U112, U121, U140, U154, U159, U161, U171, U210, U211, U213, U220, U226, U228, U239  <b>CWC:</b> 133-135, 161, 162, 211-214, 221-223, 241, 251, 252, 261, 271, 272, 281, 291, 311, 331, 341, 342, 343, 351, 352, 451, 461, 471, 491, 551, 561, 612, 721-728, 741, 751, 791, 792
6	Aqueous Waste such as wastewater, ethylene glycol, dilute acetic acid solutions, coolant oil, aqueous cleaners, slurry waste, contaminate storm water	Aqueous Treatment (Wastewater Treatment)	<b>RCRA:</b> D001, D004-D011, D018, D019- D029, D032-D036, D038-D043, F001-F005, F037- F039, K048 - K052, K086, K087, P005, U002, U003, U019, U031, U037, U056, U057, U070-U072, U080, U112, U121, U140, U154, U159, U161, U188, U208, U209, U210, U213, U220, U226, U228, U239  <b>CWC:</b> 121-123, 131-135, 141, 211, 212, 214, 221, 222, 223, 261, 281, 291, 331, 341, 342, 343, 521, 541, 551, 561, 612, 726, 727, 728, 741, 791, 792, 801
7	Corrosives such as spent acid, cleaning compounds, caustic solutions	Neutralization	<b>RCRA:</b> D002, D004-D011, D018, F007-F009, F019, K086, U134  <b>CWC:</b> 121-123, 141, 311, 551, 612, 721, 722, 723, 724, 791, 792
8	Miscellaneous metal bearing waste	Inorganic Treatment	<b>RCRA:</b> D002, D004-D011, D018, F006-F009, F019, F039, K086, P010-P012, U134  <b>CWC:</b> 121-123, 131-135, 141, 521, 541, 551, 561, 571, 581, 591, 611, 612, 721-728, 791, 792
9	Non-pumpable sludges, contaminated soils, filter cake	Inorganic Treatment	<b>RCRA:</b> F037, F038, F039, K048, K050, K051, K052, K158  <b>CWC:</b> 171, 172, 214, 222, 223, 231, 311, 431, 441, 451, 461, 471, 491, 531, 611
10	Solid Fuel such as contaminated rags, wipes, wood and other debris	Solids Consolidation	<b>RCRA:</b> D001, D004-D011, D018, D019, D021-D030, D032-D036, D038, D039, D040, D043, F001-

Waste Stream Number	Common Name and Typical Wastes	Typical Management Methods	Authorized U.S. EPA RCRA Waste Code & California Waste Codes (CWC)
	having high BTU value, reacted resins, solids spill clean up residuals		F005, F007-F009, F019, F037, F038, K048-K051, U002, U003, U019, U031, U037, U056, U057, U070, U080, U108, U112, U121, U140, U154, U159, U161, U208, U210, U213, U220, U226, U228, U239  <b>CWC:</b> 141, 161, 162, 171, 172, 181, 211, 212, 213, 214, 223, 241, 251, 252, 261, 272, 281, 291, 311, 331, 351, 352, 411, 421, 431, 441, 451, 461, 471, 491, 511, 512, 513, 541, 551, 561, 571, 611, 612, 613, 751, 801
11	Solids for consolidation and landfill such as solid corrosive materials, sodium bicarbonate, absorbent with hydrocarbons, plating sludges, baghouse dust, petroleum contaminated soils	Solids Consolidation	<b>RCRA:</b> D004-D011, D018, D019, D021-D030, D032-D040, F001-F006, F007-F009, F019, F024, F037, F039, K048-K052, K052, K086, U002, U003, U019, U031, U037, U056, U057, U070, U080, U108, U112, U121, U122, U140, U154, U159, U161, U208, U209, U210, U213, U220, U226, U228, U239  <b>CWC:</b> 141, 181, 211, 212, 213, 214, 223, 232, 241, 251, 271, 281, 291, 311, 331, 351, 352, 491, 511, 512, 513, 541, 612, 613, 751, 801
12	Solids for consolidation and incineration such as packaged laboratory chemicals (lab packs), contaminated debris, paint related materials, mill waste, process waste	Solids Consolidation	<b>RCRA:</b> D001, D002, D004-D043, F001-F005, F007-F009, F019F037-F039, K048-K052, K086, K156, K158, K161,K169-K172, P005, U002, U003, U019, U031, U037, U056, U057, U070, U071, U072, U080, U108, U112, U121, U122, U140, U154, U159, U161, U208,U209, U210, U213, U220, U226, U228, U239  <b>CWC:</b> 141, 181, 214, 231, 232, 241, 251, 252, 271, 272, 281, 291, 311, 331, 351, 352, 511, 541, 551, 611, 612, 751, 801
13	Solids such as contaminated rags, wipes, wood plastic containers, and other debris having medium BTU value,	Debris Shredder	<b>RCRA:</b> D001, D004-D011, D018-D028, D032-D036, D038-D043, F001-F005, F037, F038, F039, K048,-F052, U019, U070-U072, U108, U122

Waste Stream Number	Common Name and Typical Wastes	Typical Management Methods	Authorized U.S. EPA RCRA Waste Code & California Waste Codes (CWC)
			<b>CWC:</b> 141, 181, 211, 212, 213, 214, 223, 232, 241, 251, 261, 271, 272, 281, 291, 311, 331, 351, 352, 491, 511, 512, 513, 541, 612, 613, 751
14	Aerosol cans		<b>RCRA:</b> D001, U002, U057, U080, U154, U159, U210, U220, U226, U228, U239  <b>CWC:</b> 123, 132, 133, 134, 135, 141, 211, 212, 213, 214, 221, 223, 232, 281, 291, 331, 341, 342, 343, 551, 561, 612
15	Contaminated containers	Drum Crush	<b>RCRA:</b> None  <b>CWC:</b> 121-123, 131-135, 141, 151, 161, 162, 171, 172, 181, 211-214, 221-223, 231, 232, 241, 251, 252, 261, 271, 272, 281, 291, 311, 331, 341, 342, 343, 351, 352, 411, 421, 431, 441, 451, 461, 471, 481, 491, 511-513, 521, 531, 541, 551, 561, 571, 581, 591, 611-613, 721-728, 741, 751
16	Contaminated tanker trucks	Truck Wash	<b>RCRA:</b> D001, D002, D004-D043, F001-F009, F019, F024, F027, F037, F038, F039, K048-K052, K086, K087, K156-K159, K161, K169-K172, P004, P005, P008, P010-P012, P014-P016, P018, P022, P024, P026, P028, P037, P038, P050, P051, P054, P058-P060, P067, P068, P071-P073, P075, P076, P078, P087-P089, P092, P102, P103, P105, P108, P110, P113-P0115, P120, P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U002-U004, U019, U031, U037, U043, U044, U051, U052, U055-U057, U070-U072, U080, U108, U110, U112, U121, U122, U133, U134, U140, U151, U154, U159, U161, U171, U188, U208-U211, U213, U220, U226, U228, U239, U271, U278, U279, U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409-U411  <b>CWC:</b> 121-123, 131-135, 141, 151, 161, 162, 171, 172, 181, 211-214, 221-223, 231, 232, 241, 251, 252,

Waste Stream Number	Common Name and Typical Wastes	Typical Management Methods	Authorized U.S. EPA RCRA Waste Code & California Waste Codes (CWC)
			261, 271, 272, 281, 291, 311, 331, 341, 342, 343, 351, 352, 411, 421, 431, 441, 451, 461, 471, 481, 491, 511-513, 521, 531, 541, 551, 561, 571, 581, 591, 611-613, 721-728, 741, 751, 791, 792, 801
17	Lab Packs	Small Container Management/Lab Pack	<b>RCRA:</b> D001, D002, D004-D043, F001-F005, F027, P004, P005, P008, P010-P012, P014-P016, P018, P022, P024, P026, P028, P037, P038, P050, P051, P054, P058-P060, P067, P068, P071-P073, P075, P076, P078, P087-P089, P092, P102, P103, P105, P108, P110, P113-P0115, P120, P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U002-U004, U019, U031, U037, U043, U044, U051, U052, U055-U057, U070-U072, U080, U108, U110, U112, U121, U122, U133, U134, U140, U151, U154, U159, U161, U171, U188, U208-U211, U213, U220, U226, U228, U239, U271, U278, U279, U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409-U411  <b>CWC:</b> 121-123, 131-135, 141, 151, 161, 162, 171, 172, 181, 211-214, 221-223, 231, 232, 241, 251, 252, 261, 271, 272, 281, 291, 311, 331, 341, 342, 343, 351, 352, 411, 421, 431, 441, 451, 461, 471, 481, 491, 511-513, 541, 551, 561, 612, 711, 721-728, 741, 751, 791, 792
18.	Storage/ Offsite Transfer	Storage in containers or tanks	<b>RCRA: Table 2</b> <b>CWC: Table 2</b>

**TABLE 2  
WASTE CODES**

Waste Code	Common Name	Properties
D001	Ignitable	Flammable
D002	Corrosive	Corrosive
D003	Reactive	Reactive
D004	Arsenic	Toxic
D005	Barium	Toxic
D006	Cadmium	Toxic
D007	Chromium	Toxic
D008	Lead	Toxic
D009	Mercury	Toxic
D010	Selenium	Toxic
D011	Silver	Toxic
D012	Endrin	Toxic
D013	Lindane	Toxic
D014	Methoxychlor	Toxic
D015	Toxaphene	Toxic
D016	2,4-D	Toxic
D017	2,4,5-TP (Silvex)	Toxic
D018	Benzene	Toxic
D019	Carbon Tetrachloride	Toxic
D020	Chlordane	Toxic
D021	Chlorobenzene	Toxic
D022	Chloroform	Toxic
D023	o- Cresol	Toxic
D024	m- Cresol	Toxic
D025	p- Cresol	Toxic
D026	Cresol	Toxic
D027	1, 4- Dichlorobenzene	Toxic
D028	1, 2- Dichloroethane	Toxic
D029	1, 1- Dichlorethylene	Toxic
D030	2, 4- Dinitrotoluene	Toxic
D031	Heptachlor (and its epoxide)	Toxic
D032	Hexachlorbenzene	Toxic
D033	Hexachlorobutadiene	Toxic
D034	Hexachloroethane	Toxic
D035	Methyl Ethyl Ketone	Toxic
D036	Nitrobenzene	Toxic
D037	Pentachlorophenol	Toxic
D038	Pyridine	Toxic
D039	Tetrachloroethylene	Toxic
D040	Trichloroethylene	Toxic
D041	2,4,5-Trichlorophenol	Toxic
D042	2,4,6-Trichlorophenol	Toxic
D043	Vinyl Chloride	Toxic
F001	halogenated solvents used in degreasing:	Toxic
F002	spent halogenated solvents	Toxic
F003	spent non-halogenated solvents	Flammable, Toxic

Waste Code	Common Name	Properties
F004	spent non-halogenated solvents	Toxic
F005	spent non-halogenated solvents	Flammable, Toxic
F006	wastewater treatment sludges from electroplating	Toxic
F007	spent cyanide plating bath solutions from electroplating operations	Reactive, Toxic
F008	plating bath residues from electroplating operations where cyanides are used in the process	Reactive, Toxic
F009	spent stripping and cleaning bath solutions from electroplating operations where cyanides are used	Reactive, Toxic
F019	wastewater treatment sludges from the chemical conversion coating of aluminum	Toxic
F024	Process wastes from the production of certain chlorinated aliphatic hydrocarbons	Toxic
F027	discarded unused formulations containing tri, tetra or penta chlorophenol	Toxic
F037	Petroleum refinery primary oil/water/solids separation sludge	Toxic
F038	oil/water/solids separation sludge	Toxic
F039	leachate	Toxic
K048	dissolved air flotation (DAF) float from the petroleum refining industry	Toxic
K049	slop oil emulsion solids from the petroleum refining industry	Toxic
K050	heat exchanger bundle cleaning sludge from the petroleum refining industry	Toxic
K051	API separator sludge from the petroleum refining industry	Toxic
K052	tank bottoms (leaded) from the petroleum refining industry	Toxic
K086	washes and sludges from cleaning tubs and equipment used in the formulation of ink;	Toxic
K087	decanter tank tar sludge from coking operations.	Toxic
K156	Organic hazardous waste from the production of carbamates and carbamoyl oximes	Toxic
K157	Hazardous wastewaters from the production of carbamates and carbamoyl oximes.	Toxic
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.	Toxic
K159	Organics from the treatment of thiocarbamate hazardous wastes.	Toxic
K161	Purification solids, bag house dust and floor sweepings from the production of dithiorcarbamate acids and their salts.	Toxic
K169	Crude oil storage tank sediment from petroleum refining operations	Toxic
K170	Clarified slurry oil storage tank sediment from petroleum refining operations	Toxic
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors	Flammable, Toxic
K172	Spent hydro refining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors	Flammable, Toxic
P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-	Toxic

Waste Code	Common Name	Properties
	chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)- (OR) Aldrin (H)	
P005	Allyl alcohol	Toxic
P008	4-Aminopyridine (OR) 4-Pyridinamine	Toxic
P010	Arsenic acid H3AsO4	Toxic
P011	Arsenic oxide As2O5 (OR) Arsenic pentoxide	Toxic
P012	Arsenic oxide As2O3(OR) Arsenic trioxide Benzenethiol (OR) Thiophenol	Toxic
P014	Benzenethiol (OR) Thiophenol	Toxic
P015	Beryllium	Toxic
P016	Dichloromethyl ether	Toxic
P018	Brucine (OR) Strychnidin-10-one, 2,3-dimethoxy-	Toxic
P022	Carbon disulfide	Toxic
P024	p-Chloroaniline	Toxic
P026	Dichloromethyl ether (OR) Methane, oxybis<chloro-1-(o-Chlorophenyl)thiourea	Toxic
P028	Benzyl chloride	Toxic
P037	2,7:3,6-Dimethanonaphth<2,3-b>oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6aalpha, 7beta, 7aalpha)- (OR) Dieldrin	Toxic
P038	Arsine, diethyl- (OR) Diethylarsine	Toxic
P050	6,9-Methano-2,4,3 benzodioxathiepin,6,7,8,9,10, 10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide (OR) Endosulfan	Toxic
P051	2,7:3,6-Dimethanonaphth<2,3-b>oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2abeta, 3alpha, 6alpha, 6abeta, 7beta, 7aalpha)- & metabolites (OR) Endrin (OR) Endrin, & metabolites	Toxic
P054	Aziridine	Toxic
P058	Acetic acid, fluoro-, sodium salt	Toxic
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro (OR) Heptachlor	Toxic
P060	1,4,5,8-Dimethanonaphthalene (OR) Isodrin	Toxic
P067	Aziridine, 2-methyl-	Toxic
P068	Hydrazine, methyl	Toxic
P071	Methyl parathion (OR) Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester	Toxic
P072	alpha-Naphthylthiourea (OR) Thiourea, 1-naphthalenyl-	Toxic
P073	Nickel carbonyl (OR) Nickel carbonyl Ni(CO)4, (T-4)-	Toxic
P075	Nicotine, & salts (OR) Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts	Toxic
P076	Nitric oxide (OR) Nitrogen oxide NO	Toxic
P078	Nitrogen dioxide (OR) Nitrogen oxide NO2	Toxic
P087	Osmium oxide OsO4, (T-4)- (OR) Osmium tetroxide	Toxic
P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	Toxic
P089	Parathion (OR) Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	Toxic
P092	Mercury, (acetato-O)phenyl- (OR) Phenylmercury acetate	Toxic
P102	2-Propyn-1-ol	Toxic



Waste Code	Common Name	Properties
P103	Selenourea	Toxic
P105	Sodium azide	Toxic
P108	Strychnidin-10-one, & salts (OR) Strychnine, & salts	Toxic
P110	Tetraethyl lead	Toxic
P113	Thallic oxide (OR) Thallium oxide $Tl_2O_3$	Toxic
P114	Selenious acid, dithallium (1+) salt (OR) Thallium(I) selenite	Toxic
P115	Sulfuric acid, dithallium (1+) salt (OR) Thallium(I) sulfate	Toxic
P120	Vanadium oxide $V_2O_5$ (OR) Vanadium pentoxide	Toxic
P127	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate (OR) Carbofuran	Toxic
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	Toxic
P185	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime (OR) Tirpate	Toxic
P188	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8, 8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) (OR) Physostigmine salicylate	Toxic
P189	Carbamic acid, [(dibutylamino)-thio] methyl-, 2,3-dihydro-2, 2-dimethyl -7-benzofuranyl ester (OR) Carbosulfan	Toxic
P190	Carbamic acid, methyl-, 3-methylphenyl ester (OR) Metolcarb	Toxic
P191	Carbamic acid, dimethyl-, 1- [(dimethyl-amino)carbonyl]-5-methyl-1H- pyrazol-3-yl ester (OR) Dimetilan	Toxic
P192	Isolan (OR) Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester	Toxic
P194	Ethanimidothioc acid, 2-(dimethylamino)-N-[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester (OR) Oxamyl	Toxic
P196	Manganese dimethyldithiocarbamate (OR) Manganese, bis(dimethylcarbomodithioato-S,S')-,	Toxic
P197	Formparanate (OR) Methanimidamide, N,N-dimethyl-N'-[2-methyl-4- [(methylamino)carbonyl]oxyphenyl]-	Toxic
P198	Methanimidamide, N,N-dimethyl-N'-3-[(methylamino)-carbonyl oxy]phenyl-,monohydrochloride (OR) Formetanate hydrochloride	Toxic
P199	Methiocarb (OR) Mexacarbate (OR) Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	Toxic
P201	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (OR) Promecarb	Toxic
P202	m-Cumenyl methylcarbamate (OR) 3-Isopropylphenyl N-methylcarbamate (OR) Phenol, 3-(1-methylethyl)-, methyl carbamate	Toxic
P203	Aldicarb sulfone (OR) Propanal, 2-methyl-2-(methylsulfonyl)-, O-[(methylamino)carbonyl] oxime	Toxic
P204	Physostigmine CAS#: 54-47-6	Toxic
P205	Zinc, bis(dimethylcarbomodithioato-S,S')-, (OR) Ziram	Toxic
U002	Acetone	Flammable
U003	Acetonitrile	Flammable, Toxic
U004	Acetophenone	Toxic
U019	Benzene	Flammable, Toxic

Waste Code	Common Name	Properties
U031	n-Butyl Alcohol	Flammable
U037	Benzene, chloro-	Flammable
U043	Ethene, chloro-	Toxic
U044	Chloroform	Toxic
U051	Creosote	Toxic
U052	Cresol (Cresylic acid)	Toxic
U055	Cumene	Flammable, Toxic
U056	Cyclohexane	Flammable
U057	Cyclohexanone	Flammable
U070	Benzene, 1,2-dichloro-	Toxic
U071	m-Dichlorobenzene	Toxic
U072	p-Dichlorobenzene	Toxic
U080	Methane, dichloro-	Flammable
U108	1,4-Dioxane	Flammable
U110	Dipropylamine	Flammable
U112	Ethyl Acetate	Flammable
U121	Methane, trichlorofluoro-	Toxic
U122	Formaldehyde	Toxic
U133	Hydrazine	Flammable, Toxic
U134	Hydrofluoric acid	Corrosive, Toxic
U140	Isobutyl alcohol	Flammable
U151	Mercury	Toxic
U154	Methanol	Flammable
U159	Methyl ethyl ketone	Flammable
U161	Methyl isobutyl ketone	Flammable
U171	2-Nitropropane	Flammable
U188	Phenol	Toxic
U208	1,1,1,2-Tetrachloroethane	Toxic
U209	1,1,2,2-Tetrachloroethane	Toxic
U210	Tetrachloroethylene	Toxic
U211	Carbon tetrachloride	Toxic
U213	Furan, tetrahydro-	Flammable
U220	Toluene	Flammable, Toxic
U226	Methyl chloroform	Toxic
U228	Trichloroethylene	Toxic
U239	Xylene	Flammable
U271	Benomyl (OR) Carbamic acid, .1-(butylamino)carbonyl-1H-benzimidazol-2-yl-, methyl ester	Toxic
U278	Bendiocarb (OR) 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	Toxic
U279	Carbaryl (OR) 1-Naphthalenol, methylcarbamate	Toxic
U280	Barban (OR) Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	Toxic
U364	Bendiocarb phenol (OR) 1,3-benzodioxol-4-ol, 2,2-dimethyl-	Toxic
U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- (OR) Carbofuran phenol	Toxic
U372	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (OR) Carbendazim	Toxic
U373	Carbamic acid, phenyl-, 1-methylethyl ester (OR) Propham	Toxic

Waste Code	Common Name	Properties
U387	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester (OR) Prosulfocarb	Toxic
U389	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester (OR) Triallate	Toxic
U394	A2213 (OR) Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl esterZ	Toxic
U395	Diethylene glycol, dicarbamate (OR) Ethanol, 2,2'-oxybis-, dicarbamate	Toxic
U404	Ethanamine, N,N-diethyl (OR) Triethylamine	Toxic
U409	Carbamic acid, .1,2-phenylenebis (iminocarbonothioyl) bis-, dimethyl ester (OR) Thiophanate-methyl	Toxic
U410	Ethanimidothioic acid, N,N'-.thiobis.(methylimino) carbonyloxybis-, dimethyl ester (OR) Thiodicarb	Toxic
U411	Phenol, 2-(1-methylethoxy)-, methylcarbamate (OR) Propoxur	Toxic

### California Waste Code

121	Alkaline solution (pH <UN-> 12.5) with metals	Corrosive
122	Alkaline solution without metals (pH > 12.5)	Corrosive
123	Unspecified alkaline solution	Corrosive
131	Aqueous solution (2 < pH < 12.5) containing reactive anions	Corrosive
132	Aqueous solution with metals	Toxic
133	Aqueous solution with 10% or more total organic residues	Toxic
134	Aqueous solution with less than 10% total organic residues	Toxic
135	Unspecified aqueous solution	Toxic
141	Off-specification, aged, or surplus inorganics	Toxic
151	Asbestos-containing waste	Toxic
161	Fluid-cracking catalyst (FCC) waste	Toxic
162	Other spent catalyst	Toxic
171	Metal sludge (see 121)	Toxic
172	Metal dust (see 121) and machining waste	
181	Other inorganic solid waste	Toxic
211	Halogenated solvents	Toxic
212	Oxygenated solvents	Toxic
213	Hydrocarbon solvents	Toxic
214	Unspecified solvent mixture	Toxic
221	Waste oil and mixed oil	Toxic
222	Oil/water separation sludge	Toxic
223	Unspecified oil-containing waste	Toxic
231	Pesticide rinse water	Toxic
232	Pesticides and other waste associated with pesticide production	Toxic
241	Tank bottom waste	Toxic
251	Still bottoms with halogenated organics	Toxic
252	Other still bottom waste	Toxic
261	Polychlorinated biphenyls and material containing PCBs	Toxic
271	Organic monomer waste	Toxic
272	Polymeric resin waste	Toxic
281	Adhesives	Toxic
291	Latex waste	Toxic
311	Pharmaceutical waste	Toxic
331	Off-specification, aged, or surplus organics	Toxic
341	Organic liquids with halogens	Toxic
342	Organic liquids with metals	Toxic
343	Unspecified organic liquid mixture	Toxic
351	Organic solids with halogens	Toxic
352	Other organic solids	Toxic
411	Alum and gypsum sludge	Toxic
421	Lime sludge	Toxic
431	Phosphate sludge	Toxic
441	Sulfur sludge	Toxic
451	Degreasing sludge	Toxic
461	Paint sludge	Toxic
471	Paper sludge/pulp	Toxic
481	Tetraethyl lead sludge	Toxic

---

491	Unspecified sludge waste	Toxic
511	Empty pesticide containers 30 gallons or more	Toxic
512	Other empty containers 30 gallons or more	Toxic
513	Empty containers less than 30 gallons	Toxic
521	Drilling mud	Toxic
531	Chemical toilet waste	Toxic
541	Photochemicals/photoprocessing waste	Toxic
551	Laboratory waste chemicals	Toxic
561	Detergent and soap	Toxic
571	Fly ash, bottom ash, and retort ash	Toxic
581	Gas scrubber waste	Toxic
591	Baghouse waste	Toxic
611	Contaminated soil from site clean-ups	Toxic
612	Household waste	Flammable, Toxic
613	Auto shredder waste	Toxic
711	Liquids with cyanides > 1,000 mg/L	Toxic, Reactive
721	Liquids with arsenic $\geq 500$ mg/l	Toxic
722	Liquids with cadmium $\geq 100$ mg/l	Toxic
723	Liquids with chromium (VI) $\geq 500$ mg/l	Toxic
724	Liquids with lead $\geq 500$ mg/l	Toxic
725	Liquids with mercury $\geq 20$ mg/l	Toxic
726	Liquids with nickel $\geq 134$ mg/l	Toxic
727	Liquids with selenium $\geq 100$ mg/l	Toxic
728	Liquids with thallium $\geq 130$ mg/l	Toxic
741	Liquids with halogenated organic compounds $\geq 1000$ mg/l	Toxic
751	Solids or sludges with halogenated organic compounds > 1000mg/kg	Toxic
791	Liquids with pH $\leq 2$	Toxic
792	Liquids with pH $\leq 2$ with metals	Toxic
801	Waste potentially containing dioxins	Toxic

**TABLE 3**  
**INDIVIDUAL TANKS, DRUM STORAGE AREAS, AND PROCESS EQUIPMENT**

Tank, Building, or Equipment	Location	STORAGE			TREATMENT		
		Unit #	Store Capacity (gallons)	Process Code	Unit #	Treat Capacity	Process Codes
North Storage Building*	North Storage Building	1	45,650 (include one 40-cu yd bin)	S01			
South Storage Building	South Storage Building	2	140,580	S01			
Sampling Area	Sampling Area	3	40,755	S01			
West Storage Building #1	West Storage Building #1	4	18,480	S01			
West Storage Building #2	West Storage Building #2	5	65,890	S01			
<i>Drum Pump Area<sup>1</sup></i>	<i>Sampling Area</i>	6	6,000	<i>S01</i>			
<i>Bin Storage Areas<sup>1</sup></i> <i>(Does not include the bin in North Storage)</i>	<i>Tank Farm F</i>	7	320 Cubic Yards	S01			
	<i>North Roll-off Storage, Consolidation Area, West Roll-off Storage East Roll-off Storage</i>						
A	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
B	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
C	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
D	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
E	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
F	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
G	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
H	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
I	Tank Farm CLR	10	5,940	S02	10	10 gpm	T01
K	Tank Farm A	8	9,230	S02	8	10 gpm	T01
L	Tank Farm A	8	9,230	S02	8	10 gpm	T01
M	Tank Farm A	8	9,230	S02	8	10 gpm	T01
N <sup>2</sup>	Tank Farm E	12	9,290	S02	12	10 gpm	T01
O <sup>2</sup>	Tank Farm E	12	9,290	S02	12	10 gpm	T01
1	Tank Farm A	8	4,200	S02	26	counted	T04
2	Tank Farm A	8	5,093	S02	8	10 gpm	T01
3	Tank Farm A	8	5,093	S02	8	10 gpm	T01

Tank, Building, or Equipment	Location	STORAGE			TREATMENT		
		Unit #	Store Capacity (gallons)	Process Code	Unit #	Treat Capacity	Process Codes
4	Tank Farm A	8	4,555	S02	26	counted	T04
5	Tank Farm A	8	6,360	S02	8	10 gpm	T01
6	Tank Farm A	8	5,093	S02	8	10 gpm	T01
7	Tank Farm A	8	5,093	S02	8	10 gpm	T01
8	Tank Farm A	8	4,555	S02	26	counted	T04
9	Tank Farm A	8	6,360	S02	8	10 gpm	T01
10	Tank Farm A	8	5,093	S02	8	10 gpm	T01
11	Tank Farm A	8	5,093	S02	8	10 gpm	T01
12	Tank Farm A	8	4,555	S02	26	counted	T04
16	Tank Farm G	13	1,962	S02	13	10 gpm	T01
17	Tank Farm G	13	1,962	S02	13	10 gpm	T01
18	Tank Farm G	13	535	S02	13	10 gpm	T01
19	Tank Farm G	13	1,962	S02	13	10 gpm	T01
20	Tank Farm G	13	1,962	S02	13	10 gpm	T01
21	Tank Farm G	13	1,895	S02			
26	Tank Farm H	14	8,800	S02	14	10 gpm	T01
27	Tank Farm H	14	8,800	S02	14	10 gpm	T01
28	Tank Farm H	14	8,800	S02	14	10 gpm	T01
29	Tank Farm H	14	8,800	S02	14	10 gpm	T01
30	Tank Farm H	14	8,800	S02	14	10 gpm	T01
31	Tank Farm H	14	8,800	S02	14	10 gpm	T01
32	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
33	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
34	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
35	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
36	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
37	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
38	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
39	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
40	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
41	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
42	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01

Tank, Building, or Equipment	Location	STORAGE			TREATMENT		
		Unit #	Store Capacity (gallons)	Process Code	Unit #	Treat Capacity	Process Codes
43	Tank Farm MNO	16	8,800	S02	16	10 gpm	T01
44	Tank Farm CLR	10	8,800	S02	10	10 gpm	T01
45	Tank Farm CLR	10	8,800	S02	10	10 gpm	T01
46	Tank Farm CLR	10	8,800	S02	10	10 gpm	T01
47	Tank Farm CLR	10	8,800	S02	10	10 gpm	T01
48	Tank Farm CLR	10	4,000	S02	10	10 gpm	T01
49	Tank Farm CLR	10	4,000	S02	10	10 gpm	T01
50	Tank Farm CLR	10	4,000	S02	10	10 gpm	T01
61	Tank Farm Q	17	13,113	S02	17	10 gpm	T01
64	Tank Farm Q	17	19,400	S02	17	10 gpm	T01
65	Tank Farm Q	17	19,400	S02	17	10 gpm	T01
75	Tank Farm Q	17	12,700	S02	17	10 gpm	T01
78 <sup>1</sup>	Tank Farm S	21	12,000	S02			
79 <sup>1</sup>	Tank Farm S				21	10 gpm	T01
80 <sup>1</sup>	Tank Farm S	21	12,000	S02			
81 <sup>2</sup>	Tank Farm Q	17	3,000	S02	17	10 gpm	T01
82 <sup>1</sup>	Tank Farm S				21	10 gpm	T01
83	Tank Farm I	15	11,655	S02	15	10 gpm	T01
84	Tank Farm I	15	11,655	S02	15	10 gpm	T01
85	Tank Farm I	15	11,655	S02	15	10 gpm	T01
86 <sup>2</sup>	Tank Farm Q	17	1,500	S02	17	10 gpm	T01
87 <sup>2</sup>	Tank Farm Q	17	200	S02	17	10 gpm	T01
88 <sup>2</sup>	Tank Farm Q	17	1,500	S02	17	10 gpm	T01
89 <sup>2</sup>	Tank Farm Q	17	200	S02	17	10 gpm	T01
101	Tank Farm I	15	11,655	S02	15	10 gpm	T01
102	Tank Farm I	15	11,655	S02	15	10 gpm	T01
103	Tank Farm I	15	11,655	S02	15	10 gpm	T01
104	Tank Farm I	15	11,655	S02	15	10 gpm	T01
105 <sup>1</sup>	Tank Farm Q	17	12,000	S02	17	10 gpm	T01
106 <sup>1</sup>	Tank Farm T	22	8,300	S02			
107 <sup>1</sup>	Tank Farm T	22	8,300	S02			
108 <sup>1</sup>	Tank Farm T	22	8,300	S02			



Tank, Building, or Equipment	Location	STORAGE			TREATMENT		
		Unit #	Store Capacity (gallons)	Process Code	Unit #	Treat Capacity	Process Codes
109 <sup>1</sup>	Tank Farm T	22	8,300	S02			
A-2 <sup>2</sup>	Tank Farm F				20	20 gpm	T01
A-3 <sup>2</sup>	Tank Farm F				20		T01
A-4 <sup>2</sup>	Tank Farm F				20		T01
A-5 <sup>2</sup>	Tank Farm F				20		T01
A-6 <sup>2</sup>	Tank Farm E	12	4,794	S02	12	10 gpm	T01
A-7 <sup>2</sup>	Tank Farm E	12	4,794	S02	12	10 gpm	T01
AES1	Tank Farm Q	17	11,160	S02			
AES2	Tank Farm Q	17	11,160	S02			
AES3	Tank Farm Q	17	11,160	S02			
AES4	Tank Farm Q	17	11,160	S02			
B-2	Tank Farm K				18	36,000 gpd	T04
B-3	Tank Farm K				18		T04
B-3A	Tank Farm K				18		T04
B-4	Tank Farm K				18		T04
B-4A	Tank Farm K				18		T04
B-5	Tank Farm K				18		T04
B-6	Tank Farm K				18		T04
B-6A	Tank Farm K				18		T04
B-7	Tank Farm K				18		T04
B-8	Tank Farm K				18		T01
HTU	Tank Farm HTU	25	1,127	S02	25	5 gpm	T04
HTU-1	Tank Farm HTU	25	474	S02	25		T04
HTU-2	Tank Farm HTU	25	330	S02	25		T04
NT-1	Tank Farm J				19	10 gpm	T04
NT-2	Tank Farm J				19		T04
NT-3	Tank Farm J				19		T04
PT-1	Drum & Debris Building	28	1,160	S02	28	counted	T04
R24 (Reb-24)	Production Area	23	830	S02	23	counted	T04
R32 (Reb-32)	Production Area	23	3,647	S02	23	counted	T04

Tank, Building, or Equipment	Location	STORAGE			TREATMENT		
		Unit #	Store Capacity (gallons)	Process Code	Unit #	Treat Capacity	Process Codes
<i>R34<sup>1</sup> (Reb-34)</i>	<i>Production Area</i>	23	16,500	S02	23	counted	T04
R35 (Reb-35)	Tank Farm I	15	4,670	S02	23	counted	T04
R36 (Reb-36)	Tank Farm I	15	7,500	S02	23	counted	T04
R37 (Reb-37)	Tank Farm G	13	6,100	S02	23	counted	T04
R42 (Reb-42)	Tank Farm I	15	9,400	S02	23	counted	T04
R43 (Reb-43)	Tank Farm I	15	6,996	S02	23	counted	T04
R48 (Reb-48)	Tank Farm I	15	9,300	S02	23	counted	T04
R49 (Reb-49)	Tank Farm G	13	15,792	S02	23	counted	T04
<i>R90<sup>2</sup> (90)</i>	<i>Tank Farm E</i>	12	4,794	S02	12	10 gpm	T01
R91	Tank Farm B	9	4,743	S02	9	10 gpm	T01
R92	Tank Farm B	9	4,743	S02	9	10 gpm	T01
R93	Tank Farm B	9	4,743	S02	9	10 gpm	T01
R94	Tank Farm B	9	4,743	S02	9	10 gpm	T01
R95	Tank Farm B	9	4,743	S02	9	10 gpm	T01
<i>R96<sup>2</sup></i>	<i>Tank Farm D</i>	11	4,500	S02	11	10 gpm	T01
<i>R97<sup>2</sup></i>	<i>Tank Farm D</i>	11	4,500	S02	11	10 gpm	T01
T-13	Tank Farm K				18	counted	T04
T-24	Tank Farm CLR	24	3,400	S02	24	counted	T04
T-25	Tank Farm CLR	24	3,400	S02	24	counted	T04
TW-1	Truck Wash	34	1,700	S02	34	counted	X99
V-24	Production Area	24	1,525	S02	24	5 gpm	T04
V-25	Production Area	24	2,234	S02	24		T04
WWT	Production Area	27	3,305	S02	27	400 gpd	T04
Column 24 (C24)	Production Area				23	14 gpm	T04
Column 32 (C32)	Production Area				23	18.5 gpm	T04
<i>Column 34<sup>2</sup> (C34)</i>	<i>Production Area</i>				23	21 gpm	T04
Column 35 (C35)	Production Area				23	21 gpm	T04
Column 36 (C36)	Production Area				23	21 gpm	T04
Column 37 (C37)	Production Area				23	21 gpm	T04

Romic Environmental Technologies Corporation  
Draft Hazardous Waste Facility Permit, Attachment "A"  
EPA ID No. CAD009452657

Tank, Building, or Equipment	Location	STORAGE			TREATMENT		
		Unit #	Store Capacity (gallons)	Process Code	Unit #	Treat Capacity	Process Codes
Column 42 (C42)	Production Area				23	24.5 gpm	T04
Column 43 (C43)	Production Area				23	24.5 gpm	T04
Column 48 (C48)	Production Area				23	28 gpm	T04
Column 49 (C49)	Production Area				23	28 gpm	T04
Caustic Column (CC)	Production Area				27	20.0 gpm	T04
Caustic Reboiler (RCC)	Production Area	27	2,160	S02	27		T04
Sand Filter 1 (SF1)	Tank Farm K				18	counted	T04
Sand Filter 2 (SF2)	Tank Farm K				18	counted	T04
Stainless Steel Kettle (SSK)	Production Area	27	1,618	S02	27	2000 gpd	T04
Thin Film #1 (TF1)	Production Area				26	8 gpm	T04
Thin Film #2 (TF2)	Production Area				26	10 gpm	T04
Thin Film #3 (TF3)	Production Area				26	10 gpm	T04
Thin Film #4 <sup>2</sup> (TF4)	Production Area				26	15.5 gpm	T04
Carbon Adsorption	Adjacent to Tank Farm K				18	counted	T04
Ion Exchange Bed	Adjacent to Tank Farm K				18	counted	T04
UV/OX System	Adjacent to Tank Farm K				18	counted	T04
Aerosol Depressurization <sup>1</sup>	Portable				32	20 cans/min	X02
Debris Shredder	Drum & Debris Building				31	60,000 ppd	X02
Liquefaction Unit	Drum & Debris Building				28	22,000 gpd	T04
Enclosure <sup>1</sup>	Consolidation Booth				30	50,000 ppd	X02
Sorting Table <sup>1</sup>	Consolidation Booth				30		X02
Filter Press <sup>1</sup>	Tank Farm F				20	20,000 ppd	T04
Stabilization Roll-Offs <sup>1</sup>	Tank Farm F	7	Counted		20	40,000 ppd	T04
Lab Pack	West Storage Building #2				29	10,000 ppd	T04
Drum Crushing	North Storage Building and various				33	45 drums/hr	X02
Truck Wash	Truck Wash				34	15,000 gpd	X02
Enhanced Truck Park	Truck Park Area	35	0	S01			
Truck Loading	Various	36	0	S01			
MAXIMUM CONTAINER STORAGE CAPACITY							

317,355 gallons

Tank, Building, or Equipment	Location	STORAGE			TREATMENT		
		Unit #	Store Capacity (gallons)	Process Code	Unit #	Treat Capacity	Process Codes
			320 cubic yards				
MAXIMUM TANK STORAGE CAPACITY			793,454 gallons				
MAXIMUM TREATMENT CAPACITY						154,512 gallons per day	

\* The storage capacity includes a single storage bin of 40 cubic yards

<sup>1</sup> denotes that the unit is proposed to be installed the Facility.

<sup>2</sup> denotes that the unit is proposed to be installed and previously authorized.

gpm = gallons per minute

gpd = gallons per day

ppd = pounds per day

drums/hr = drums per hour